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ABSTRACT

The recruitment and retention of faculty in business administration and accounting at the University of California (the University) and the California State University (the State University) are evaluated. An overview of education in business considers the location, type, and level of degree programs and concentrations in business-related fields in 1983-1984 at the University and the State University, and degrees awarded in business in California and the United States during 1971 through 1980. Attention is also directed to salary offers for business graduates, degrees in business awarded to nonresident aliens at the University and the State University, and salaries paid by competing institutions to faculty, by field and rank. Efforts of the University and the State University to improve faculty recruitment and retention are reviewed, and the following recommendations are discussed: improving compensation for existing faculty, developing greater flexibility to set salaries, seeking faculty with a wider range of expertise, expanding career paths and interchange of executives and academics, and increasing the supply of potential faculty. Appendices include the text of California Assembly Bill number 2023, data on business degrees conferred on women and ethnic minorities, and a list of accreditation criteria in business and engineering. (SW)

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RECRUITMENT AND RETENTION OF BUSINESS ADMINISTRATION AND ACCOUNTING FACULTY

A Report to the Legislature in Response to Assembly Bill 2023

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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

The California Postsecondary Education Commission was created by the Legislature and the Governor in 1974 as the successor to the California Coordinating Council for Higher Education in order to coordinate and plan for education in California beyond high school. As a state agency, the Commission is responsible for assuring that the State's resources for postsecondary education are utilized effectively and efficiently; for promoting diversity, innovation, and responsiveness to the needs of students and society; and for advising the Legislature and the Governor on statewide educational policy and funding.

The Commission consists of 15 members. Nine represent the general public, with three each appointed by the Speaker of the Assembly, the Senate Rules Committee, and the Governor. The other six represent the major educational systems of the State.

The Commission holds regular public meetings throughout the year at which it takes action on staff studies and adopts positions on legislative proposals affecting postsecondary education. Further information about the Commission, its meetings, its staff, and its other publications may be obtained from the Commission offices at 1020 Twelfth Street, Sacramento, California 95814; telephone (916) 445-7933.

RECRUITMENT AND RETENTION OF BUSINESS ADMINISTRATION AND ACCOUNTING FACULTY

A Report to the Legislature in Response to Assembly Bill 2023

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1020 Twelfth Street, Sacramento, California 95814

Commission Report 83-26

Adopted June 20, 1983

CONTENTS

		Page
PREFACE		v
ONE:	EDUCATION IN BUSINESS	1
	The Scope of Education in Business	1
	Specialties in Business	2
	Recent Trends in Education for Business	6
	Future Prospects for Business Education and Employment	10
TWO:	COMPETITION FOR BUSINESS FACULTY	13
	Salary Offers for Business Graduates	13
	Salaries Paid by Competing Institutions	18
	Differences in Average Salary Among Disciplines	20
	Efforts of the California State University to Improve Recruitment and Retention	21
	Efforts of the University of California to Improve Recruitment and Retention	22
THREE:	RECOMMENDATIONS FOR ACTION	25
	1. Improving Compensation for Existing Faculty	26
	2. Developing Greater Flexibility to Set Salaries	27
	3. Seeking Faculty With a Wider Range of Expertise	27
	4. Expanding Career Paths and Interchange of Executives and Academics	31
	5. Increasing the Supply of Potential Faculty	31
APPENDIX A:	Assembly Bill No. 2023, 1982	33
APPENDIX B:	Business Degrees Conferred on Women and Ethnic Minorities, 1975-76 Through 1981-82	35
APPENDIX C:	Accreditation Criteria in Business and Engineering	39
REFERENCES		43

FIGURES

1. Number of Degrees Awarded in Business in the United States, 1971-72 Through 1979-80 7

2. Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level in the United States, 1971-72 Through 1979-80 7

3. Number of Degrees Awarded in Business by the California State University, 1971-72 Through 1981-82 8

4. Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level by the California State University, 1971-72 Through 1981-82 8

5. Number of Degrees Awarded in Business by the University of California, 1971-72 Through 1981-82 9

6. Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level by the University of California, 1971-72 Through 1981-82 9

7. Number of Degrees in Business Awarded to Nonresident Aliens by the University of California, 1975-76 Through 1981-82 16

8. Degrees in Business Awarded to Nonresident Aliens as a Percent of Total Business Degrees Awarded at Each Level by the University of California, 1975-76 Through 1981-82 16

9. Number of Degrees in Business Awarded to Nonresident Aliens by the California State University, 1975-76 Through 1981-82 17

10. Degrees in Business Awarded to Nonresident Aliens as a Percent of Total Business Degrees Awarded at Each Level by the California State University, 1975-76 Through 1981-82 17

TABLES

1. Location, Type, and Level of Degree Programs and Concentrations in Business-Related Fields, The California State University, 1983-84 3

2. Location, Type, and Level of Degree Programs and Concentrations in Business and Management, University of California, 1982-83 4-5

3. Degrees Awarded by the California Sate University and the University of California, 1981-82, as Reported by HEGIS Category of Business and Management Programs 5

4. Employment Prospects for College Graduates in Twelve Business-Related Occupations Through the Remainder of the 1980s 12

5. Average Monthly Salaries Offered to Business Graduates at Campus Placement Offices, 1978-1982 14

6. Mean and Median Range Nine-Month Salaries in Business Generally and in Six Business Specialties at all AACSB-Accredited Institutions and at Public AASCB-Accredited Institutions, 1982-83 19

7. Average Faculty Salaries by Discipline Group at 73 State Universities and Land-Grant Colleges, 1982-83 21

PREFACE

Chapter 1017 of the Statutes of 1982 (AB 2023, Elder; reproduced in Appendix A) directed the California Postsecondary Education Commission to study and make recommendations to the Legislature, industry, and higher education that address problems in the recruitment and retention of faculty in business administration and accounting at the University of California and the California State University and in engineering at the University, the State University, and the California Maritime Academy. "Due to the critical shortage of teaching personnel in the fields of engineering, business administration, and accounting," the Legislature stated, "it is necessary to determine as soon as possible the extent of the progress by institutions of higher learning regarding recruitment and retention of these individuals so that California's highest standards of academic excellence can be maintained."

The Commission's response regarding engineering faculty was due to the Legislature on March 31, 1983; and on March 21, the Commission adopted its report, Recruitment and Retention of Engineering Faculty, which contained seven groups of recommendations aimed at resolving the shortage of faculty in engineering. The Legislature asked for the Commission's recommendations on improving faculty recruitment and retention in business administration and accounting by June 30, and this present report responds to that directive.

This report differs from its companion document on engineering faculty both in length and scope. The reason is lack of data. In AB 2023, the Legislature asked the Commission to report on "relevant State, regional, and national studies" regarding faculty recruitment and retention; and the Commission devoted much of its engineering faculty report to a summary of relevant reports at State, regional, and national levels. Few comparable studies exist in business administration and accounting. These fields have no equivalents to the Engineering Manpower Commission, the National Science Foundation, the National Academy of Sciences, or the multitude of professional associations and societies that continually analyze manpower supply and demand, enrollment trends, degrees granted, research support, and a host of other topics in engineering. With only one exception, no national, regional, or State studies of education in business have been conducted comparable to those of these national organizations, the Western Interstate Commission for Higher Education (1983), or the California Postsecondary Education Commission (1982). This one exception is the research undertaken by the national accrediting agency for programs in business administration and accounting: the American Assembly of Collegiate Schools of Business (AACSB). Even the annual surveys of salary offers of new degree recipients conducted by the College Placement Council do not provide the detail for business graduates that they display for engineering graduates. In fact, so few doctorates in business are awarded each year and so few of their recipients use central college placement services (less than 20 a year) that the College Placement Council does not report their salary offers at all.

As a result, this report is more limited in scope than that on engineering faculty. Nonetheless, it seeks to be as responsive as possible to the Legislature's request for information and advice, and it reviews what limited data exist on business faculty recruitment, retention, and salaries. Part One describes the dimensions and trends in education for business nationally and in California over the past decade. Part Two indicates the competition that the California State University and the University of California face in recruiting and retaining qualified faculty in business. And Part Three contains recommendations for both long-term improvement in the competitive position of the University and State University as well as immediate and short-term assistance that the business community and the Legislature can offer to stem the deterioration of their position.

ONE

EDUCATION IN BUSINESS

Business has become the most popular field of study in American and California higher education. It accounts for one out of every five bachelor's degrees awarded nationally and one out of every 5.5 awarded by California's public and independent colleges and universities. At the University of California, only one out of every 22 undergraduates receives a degree in business, but at the California State University, one out of every four does so.

At the master's degree level, business is outranked both nationally and in California only by education. One out of every six master's degrees is in business, as is one out of every five in California, one out of every seven at the State University, and one out of every 6.5 at the University of California.

THE SCOPE OF EDUCATION IN BUSINESS

The popularity of business for undergraduates has led many of the nation's liberal arts colleges and former teacher's colleges to become in large measure business preparatory institutions. For example, all 19 campuses of the California State University offer both undergraduate and master's degree programs in business administration as well as bachelor's concentrations in accounting, finance, and marketing.

Thirteen of the 19 campuses are accredited by the American Assembly of Collegiate Schools of Business (AACSB), the nationally recognized accrediting agency in business and accounting, for their undergraduate programs in business administration, although several are in danger of losing this accreditation because of their shortage of faculty and the unreasonably high quantitative requirements of AACSB for faculty with doctorates. The 13 are Bakersfield, Chico, Fresno, Fullerton, Hayward, Long Beach, Los Angeles, Northridge, Sacramento, San Diego, San Francisco, San Jose, and San Luis Obispo. Twelve of the 13 (all except San Luis Obispo) also hold accreditation for their master's degree programs in business administration. San Diego State University's School of Accountancy has the only separately accredited accounting program in California. It is one of only 28 accredited accounting programs in the nation, and it is accredited at both the baccalaureate and master's level.

At the University of California, seven of the nine campuses offer programs in business administration, with San Francisco and Santa Cruz being the only two exceptions. Five of the seven campuses offer bachelor's degree programs (with Davis and Irvine the exceptions); five offer master's degree programs, (with San Diego and Santa Barbara the exceptions); and three offer the doctorate--Berkeley, Irvine, and Los Angeles. Two of the seven are accredited

by AACSB: Berkeley at both the undergraduate level and graduate level, and UCLA at the graduate level. (UCLA concentrates on graduate rather than undergraduate programs and therefore maintains AACSB accreditation only at the graduate level.)

Four independent universities in California are accredited in business administration by AACSB at both the baccaluareate and graduate levels--the Universities of San Diego, San Francisco, Santa Clara, and Southern California. In addition, Loyola Marymount University is accredited at the undergraduate level, and Stanford maintains accreditation at the graduate level.

SPECIALITIES IN BUSINESS

Accounting and business administration are only two specialities offered by the University and State University within their total business programs, and their problems of faculty recruitment and retention in these two specialties must be viewed in terms of their overall business offerings.

The California State University offers 26 areas of specialization or concentration in business besides the two of accounting and business administration, and Table 1 on page 3 lists the location, type, and level of all 28 as reported by the State University in its current guide booklet for prospective students, Application Information: The California State University. As can be seen, undergraduates on at least 12 of the 19 campuses may concentrate in business information systems, finance, management, or marketing as well as in accounting or business administration; and on ten campuses they can also choose among office administration, personnel management, and real estate.

Specializations at the University of California are more difficult to classify because of even greater diversity of programs and nomenclature among its campuses than at the State University, but Table 2 on pages 4 and 5 lists each of its seven campuses that offers business programs and indicates the current type and level of these programs. As can be seen, in contrast to the State University, the University emphasizes master's-level programs far more than bachelor's-level offerings, and it concentrates particularly on Master's in Business Administration (MBA) programs. At the undergraduate level, it emphasizes business economics more than the State University and more than business management or administration.

The State University awards nearly seven times as many degrees in business as the University, as Table 3 on page 5 shows. Of the 12,547 that it granted in 1981-82, nearly 90 percent were at the bachelor's level: and 1,318 were master's degrees. In contrast, among the University's 1,881 business degrees, slightly less than half were at the bachelor's level. Nearly half were master's degrees, with the rest (only 28) doctorates.

Table 3 also shows that both the University and the State University tend to categorize their business programs in only a few of the 18 fields that the federal government and the California Postsecondary Education Commission use for classifying instructional programs in business and management. The University classifies its business degrees primarily as "business management and administration," and the State University emphasizes "business and

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TABLE 1 Location, Type, and Level of Degree Programs and Concentrations in Business-Related Fields, The California State University, 1983-84

Major or Concentration	Bakersfield	Chico	Dominguez Hills	Fresno	Fullerton	Hayward	Humboldt	Long Beach	Los Angeles	Northridge	Pomona	Sacramento	San Bernardino	San Diego	San Francisco	San Jose	San Luis Obispo	Sonoma	Stanislaus
Accounting (0502)[1]	b	b	b	b/MS	b/m	b/m	b	b/m	b/MS	b/MS	b	b/MS	b	b/MS	b/m	b	b	b	b/m
Banking (0504)	b														b				
Business Administration (0511)	BS MBA	BS MBA	BS MBA	BS MS MBA	BA MBA	BS MS MBA	BS MBA	BS MS MBA	BS MS MBA	BS MS MBA	BS MS MBA	BS MS MBA	BA BS MBA	BS MS MBA	BS MS MBA	BS MBA	BS MBA		BA MBA
Business Economics (0517)			b	b	b/m				b/m										
Business Education (0501)					b		b/m		BS MA	BS m	m	b			b/m[2]				
Business (Management) Information Systems (0702)					b	b	b	b	b/m	b	b/m	b/m		b/m	b/m		b		b
Business Special Interest (0599)									b										
Business Statistics (0503)									b	m									
Data Processing (0599)			b						b										
Finance (0504)	b	b	b	b/m	b/m	b/m	b	b/m	b/m	b/m	b	b	b	b/m	b/m	b	b	b	b/m
Hotel and Restaurant Management (0508)											BS								
Industrial Management (0506)			BS																
Industrial Relations (0516)		b		b		b/m			b						b		b		
Insurance (0512)				b								b		b					
International (World) Business (0513)		b			m				b/m			b		m	b/m	b	b		
Management (Business) (0506)	b	b	b	b/m	b/m	b/m	b	b/m	b/m	b/m	b	b	b	b/m	b/m	b	b	BA/MA	b/m
Management Science (Operations Research/Management Systems) (0507)		b			b/MS	m			BS	b/m			b	m					b
Marketing (Management) (0509)	b	b	b	b/m	b/m	b/m	b/m	b/m	b/m	b/m	b	b	b	b/m	b/m	b	b	b	b/m
Office Administration (0506)		b		b/m			b	b/m	b	b/m	b	b			b	b			
Personnel Management (0513)		b	b			b/m	b	b/m	b	b		b		m	b	b			b/m
Productions Operation Management (0506)						b		b/m	b	b	b	b		m					
Public Relations (0599)			b	b	b/m	b	b	b	b							BA			
Quantitative Methods (0507)				b/m		m		b/m							b				
Real Estate (0511)	b		b	b		b	b		b	b	b	b		b/m	b				
Small Business (0599)			b			b			b										
Taxation (0502)					MS	MS			m	MS									
Transportation Management (0510)				b					b						b/m			b	

1. Numbers in parentheses indicate Higher Education General Information Survey (HEGIS) code.

2. Offered in the School of Education.

Key to Symbols: BA, BS, MS, and MBA: Bachelor of Arts or Science, Master of Science or Business Administration
b, m: bachelor's or master's concentration within another degree major.

Source: The California State University, 1982, pp. 27-28, 33.

TABLE 2 Location, Type, and Level of Degree Programs and Concentrations in Business and Management, University of California, 1982-83

CAMPUS	BACHELOR'S DEGREE	MASTER'S DEGREE	DOCTORAL DEGREE
BERKELEY	Bachelor of Science with concentration in: Accounting Economic Analysis and Policy Finance Management Science Marketing Organizational Behavior and Industrial Relations Production Management Real Estate and Urban Land Economics	Master of Science with concentration in: Accounting Business and Public Policy Economic Analysis and Policy Finance, including: General Finance Capital Markets Money and Financial Intermediaries Corporate Finance General Management Human Resources Management International Business Management Science Marketing, including: Marketing Management Market Research and Decision Models Channel and Distribution Management Operations Research Organizational Behavior and Industrial Relations Real Estate and Urban Land Economics Master of Business Administration with Faculty Sponsored Area Programs in: International Finance Public Management Modeling and Forecasting Risk Management and Insurance Strategic Planning San Francisco Evening MBA Concurrent JD/MBA Executive Program	Doctor of Philosophy (students are asked to write for details)
DAVIS		Master of Administration with concentration in: Agricultural Management Environmental and Natural Resources Management Finance and Accounting General Management Management Science Joint Master's in Engineering Management	
IRVINE		MBA, MPA, and MBPA with emphases in: Accounting Corporate Planning Management Information Systems Management of High-Technology Enterprises Marketing Operations Management Organizational Behavior Public Financial Management Public Policy Management	Doctor of Philosophy in Administration (for academic careers) with concentration in: Business Policy Finance Management Information Systems Marketing Operations Research Management of High-Technology Enterprises Public Policy Management
LOS ANGELES	Bachelor of Arts in Business Economics Concentration in Business Administration	Master of Business Administration with concentration in: Accounting-Information Systems Arts Management Behavioral and Organizational Science Business Economics Computer and Information Systems Finance Industrial Relations International and Comparative Management Management Science Management Strategy and Policy Marketing Production and Operations Management Public/Not-for-Profit Management Urban Land Economics Master of Science in Management with concentration in: Business Economics Management Science Concurrent Degree Programs: JD/MBA; MLS/MBA; MPH/MBA; MBA/MA in Latin American Studies; MBA/MA in Urban Planning; and MBA/MS in Computer Science Executive Program	Candidate in Philosophy and Doctor of Philosophy with concentration in: Accounting-Information Systems Arts Management Behavioral and Organizational Science Business Economics Computer and Information Systems Finance Industrial Relations International and Comparative Management Management Science Management Strategy and Policy Marketing Production and Operations Management Urban Land Economics

(continued)

TABLE 2 (continued)

CAMPUS	BACHELOR'S DEGREE	MASTER'S DEGREE	DOCTORAL DEGREE
RIVERSIDE	Bachelor of Arts and Bachelor of Science in Administrative Studies Bachelor of Arts in Business Economics	Master of Business Administration with concentration in: Finance Marketing	
SAN DIEGO	Bachelor of Arts in Management Science		
SANTA BARBARA	Bachelor of Arts in Business Economics	(Business Economics is an area of emphasis in the master's program in economics.)	

Source: University of California (1982) and campus catalogs.

TABLE 3 Degrees Awarded by the California State University and the University of California, 1981-82, as Reported by HEGIS Category of Business and Management Programs

HEGIS Category	California State University		University of California		
	Bachelor's	Master's	Bachelor's	Master's	Doctorates
Accounting (0502)	0	9	0	0	0
Banking and Finance (0504	0	0	0	0	0
Business Economics (0517)	0	0	477	0	0
Business Management and Administration (0506)	204	87	395	870	28
Business Statistics (0503)	0	0	0	0	0
Business and Commerce, General (0501)	10,909	1,222	0	0	0
Hotel and Restaurant Management (0508)	70	0	0	0	0
Insurance (0512)	0	0	0	0	0
International Business (0513)	0	0	0	0	0
Investments and Securities (0505)	0	0	0	0	0
Labor and Industrial Relations (0516)	0	0	0	0	0
Marketing and Purchasing (0509)	0	0	0	0	0
Operations Research (0507)	0	0	0	0	0
Personnel Management (0515)	0	0	0	0	0
Real Estate (0511)	0	0	0	0	0
Secretarial Studies (0514)	0	0	0	0	0
Transportation and Public Utilities (0510)	0	0	0	0	0
Other (0599)	46	0	36	66	0
TOTAL BUSINESS AND MANAGEMENT	11,239	1,318	908	936	28

Source: Analytical Studies, California Postsecondary Education Commission.

commerce, general." Nonetheless, Tables 1 and 2 demonstrate that both systems offer extensive options within these emphases.

RECENT TRENDS IN EDUCATION FOR BUSINESS

Today's problems in recruiting and retaining faculty in business stem less from the scope of the field and its variety of specialities than from burgeoning interest in it during the past several decades.

In 1961, America's colleges and universities granted only 50,600 baccalaureate degrees in business, but by 1971 they awarded 116,700, and in 1980 they gave out 189,200. Even greater proportional growth occurred at the master's degree level--from a mere 4,700 in 1961 to 16,650 in 1971 and 55,500 by 1980. But as the demand for bachelor's and master's degree in business has grown, student interest in continuing on for the doctorate has withered, with the number of doctorates declining by about 20 percent to some 800 a year from its peak of approximately 1,000 in 1974-75.

Nationally, the number and percent of degrees awarded in business at the bachelor's, master's, and doctoral levels during the 1970s are depicted in Figures 1 and 2 on page 7. As can be seen, the increase in baccalaureate degrees since 1971-72 has been essentially linear, with a growth rate of approximately 8,400 more degrees each year. The number of master's degrees nearly doubled during the eight years depicted there, and, as mentioned above, the number of doctorates declined.

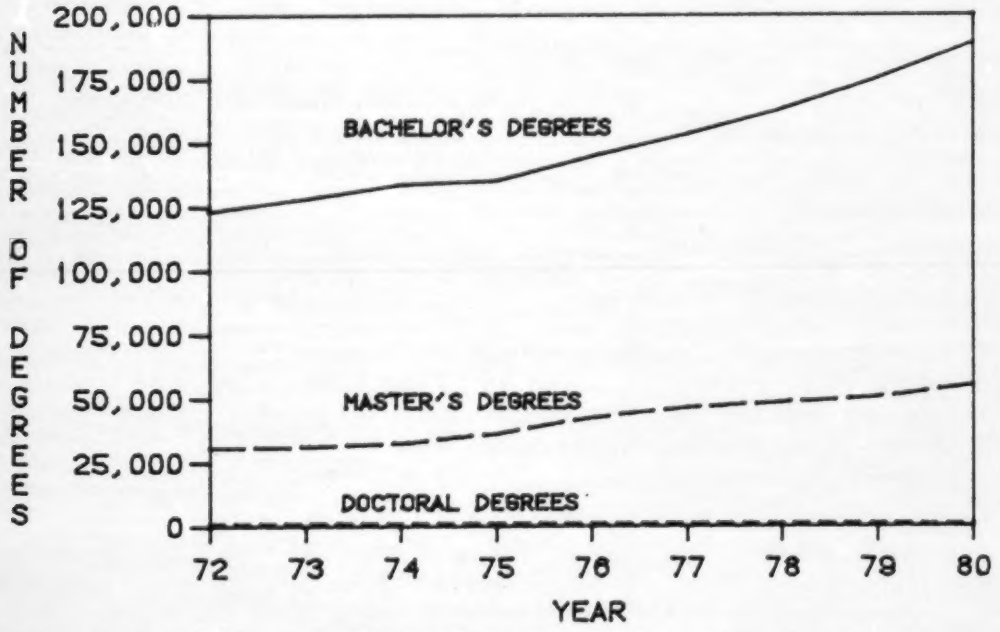
California statistics in many ways mirror those of the nation at large, although Figures 3 through 6 show considerable differences between the California State University and the University of California. At the State University, the increase in bachelor's degrees has outstripped the national rate of growth, as Figures 3 and 4 on page 8 show, even though its increase in master's degrees has lagged behind the national rate. Its growth at both levels has been relatively steady and consistent over the entire decade, unlike that of the University.

At the University, the number of bachelor's degrees in business tripled from 1971-72 to 1980-81 but then decreased in 1981-82 both numerically and as a percentage of the University's total baccalaureates (Figures 5 and 6, page 9). Its number of master's degrees has risen from about 600 a year to 900 annually and from about 10 percent to 15 percent of all its master's degrees, but the roller-coaster curves in this growth have had peaks and valleys with ratios of nearly two to one. Its number of doctorates in business reached a high of 49 in 1972-73 but then fell to a low of 16 in 1978-79 and has since held between 20 and 30 for the past three years.

Business has become increasingly attractive as a major for women and minority students. For example, between 1975-76 and 1981-82, women increased their representation among recipients of bachelor's degrees in business at the

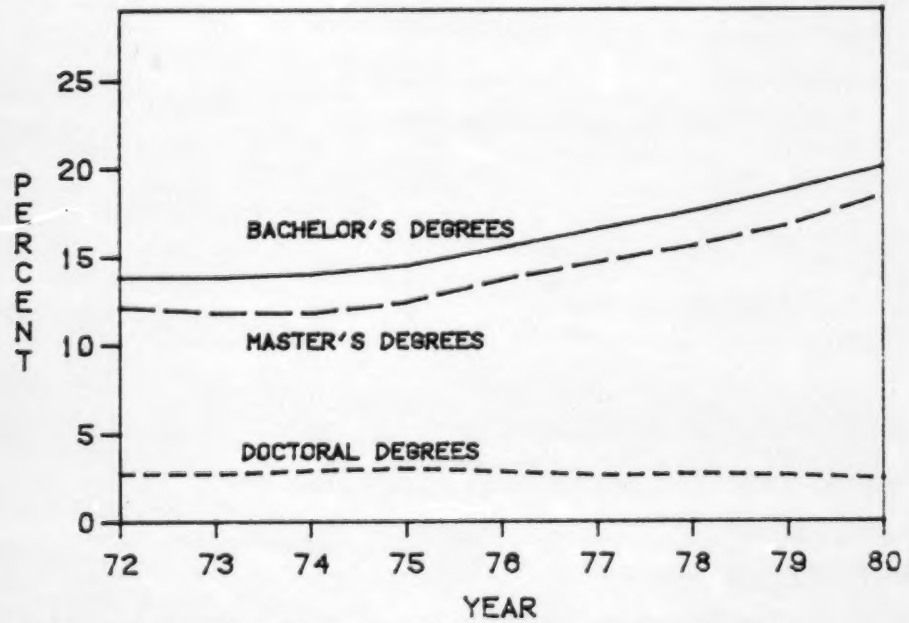
(text continues on page 10)

FIGURE 1 Number of Degrees Awarded in Business in the United States, 1971-72 Through 1979-80



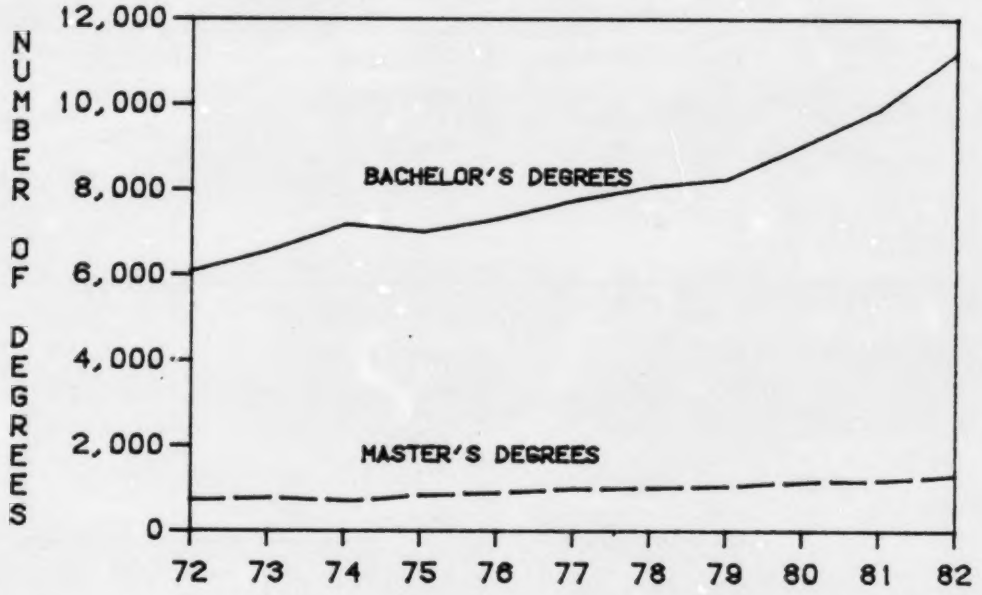
Source: National Center for Education Statistics, various years.

FIGURE 2 Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level in the United States, 1971-72 Through 1979-80



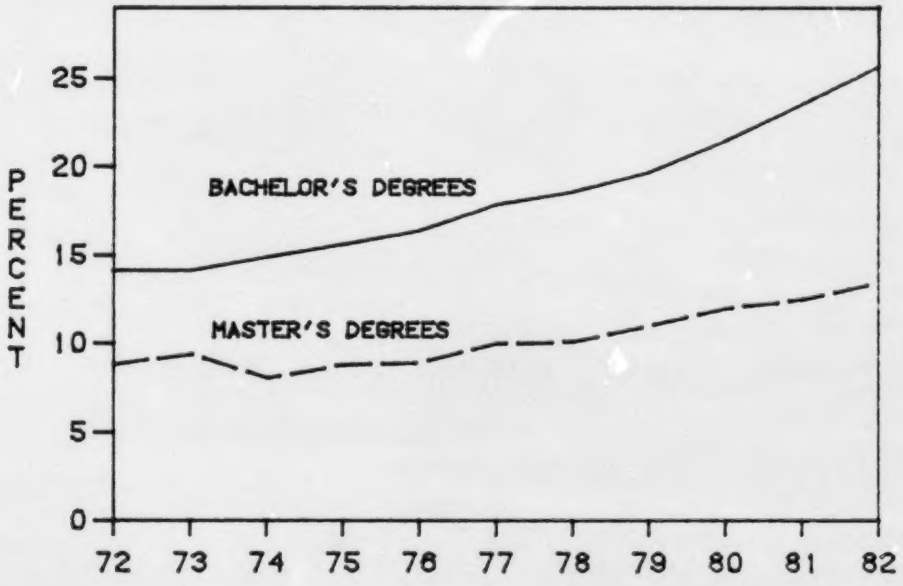
Source: National Center for Education Statistics, various years.

FIGURE 3 Number of Degrees Awarded in Business by the California State University, 1971-72 Through 1981-82



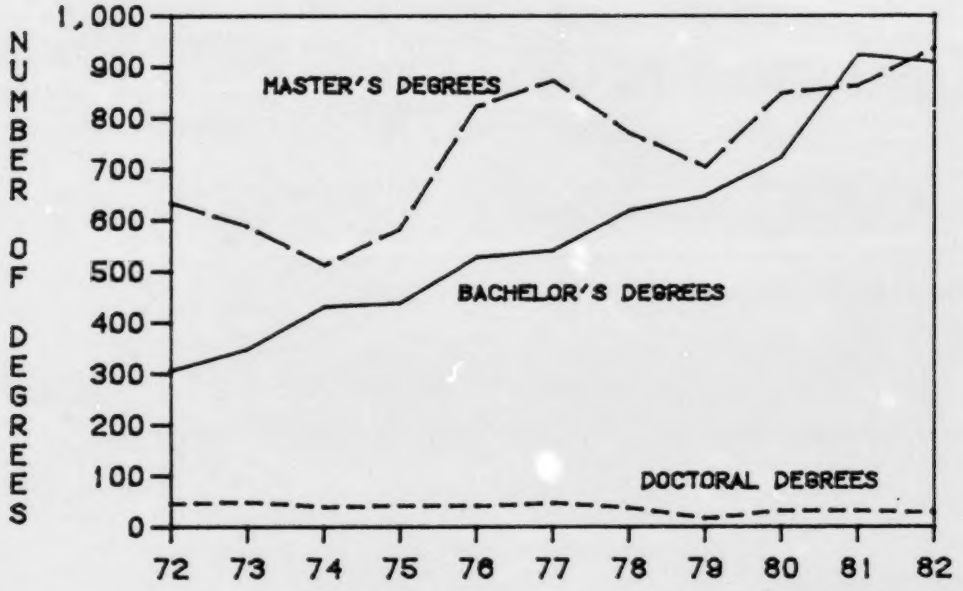
Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 4 Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level by the California State University, 1971-72 Through 1981-82



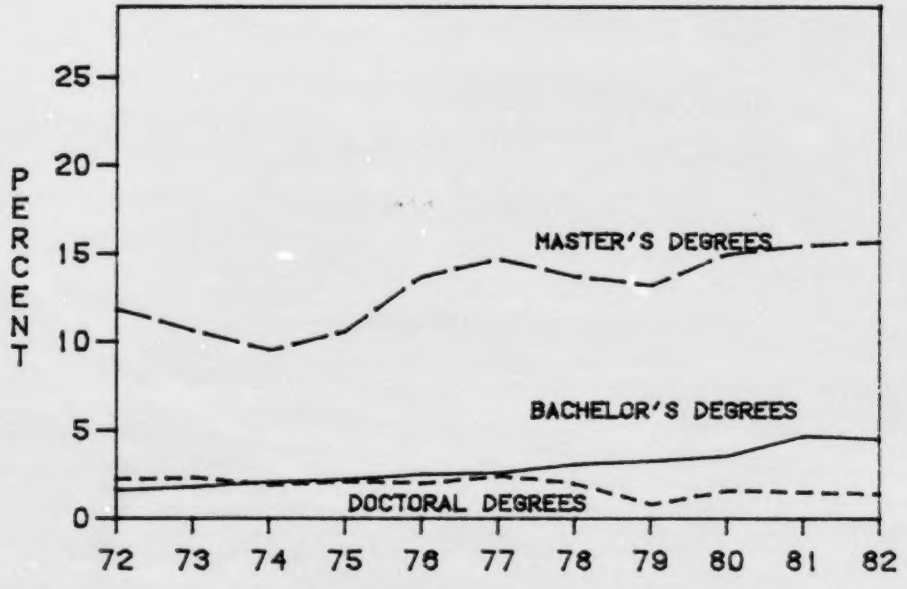
Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 5 Number of Degrees Awarded in Business by the University of California, 1971-72 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 6 Degrees Awarded in Business as a Percent of Total Degrees Awarded at Each Level by the University of California, 1971-72 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission

State University from 22 percent to 41 percent. At the University of California, their proportion grew from 27 to 36 percent over the same period. Among minority students, both bachelor's and master's degree recipients at the State University have doubled in number since 1975-76, although the University shows a less dramatic increase. (Figures in Appendix B illustrate trends in both women's and minority students' participation in business programs over these years.) Several deans of business administration foresee these percentages continuing to increase, as more women and minority students become aware of the employment opportunities available to business graduates.

Within the University, business remains only one of a large number of professional and academic programs. Undergraduate majors in business have constituted only a slowly rising proportion of all undergraduates, and business students have yet to earn 5 percent of the bachelor's degrees that it awards each year. Even its proportion of master's degrees in business appears to be leveling off at about 15 percent of the total, and its 20 to 30 doctorates a year in business constitute less than 0.2 percent of all the doctoral degrees it awards annually.

In contrast, the State University has clearly changed its image over the past decade from a network of largely teacher's and liberal arts colleges to schools of business, engineering, and related specialities. Not only does it award over six degrees in business to every one awarded by the University, it outpaces the University in numbers of master's degree recipients. For 1983-84, its undergraduate programs in business at Chico, Fullerton, Long Beach, Northridge, San Diego, and San Luis Obispo have been declared impacted. And like many other colleges and universities, the number of its business courses taken by non-business majors has increased rapidly.

Both the University and the State University find themselves in the same supply-demand problem for faculty in business that confronts most American colleges and universities: their undergraduate and master's degree programs have undergone major expansion at the very time the supply of potential faculty with doctorates has been declining. But while most American colleges have flexible personnel policies and salary ranges to deal with the problem of recruitment and retention of business faculty, the University of California and the California State University are particularly hampered in overcoming it, as Part Two of this report will indicate.

FUTURE PROSPECTS FOR BUSINESS EDUCATION AND EMPLOYMENT

Because of the recent recession, job prospects for this year's 1.4 million college graduates are not bright, even in business and accounting. For example, the College Placement Council predicts from a survey of 460 employers that 1983 hiring will fall 5 percent below 1982 levels, and Michigan State University estimates from its survey of 637 employers that bachelor's degree hiring will drop 17 percent and master's degree hiring will decline 12 percent. A survey published in the December 13, 1982, issue of U.S. News and World Report indicates that business majors in accounting, management, sales, and marketing face only lukewarm prospects--better than the bleak chances for liberal arts graduates but worse than the opportunities

for most engineering graduates (1983, pp. 34, 37). Nonetheless, Business Week reports that "corporate recruiters are converging on the nation's top business schools in the heaviest binge of last-minute hiring of MBA graduates in recent history.... Only recently, the job outlook for 1983 graduates was gloomy. But with the hiring surge, graduates of the best B-schools can now look forward to as many job offers as last year's class, at the same or higher salaries" (1983, p. 52). According to Business Week, the most aggressive recruiting is under way by financial services, high technology industries, investment bankers, and brokerage firms.

Looking beyond the immediate future, California's Department of Employment Development has projected higher job opportunity ratios over the next two years for accountants, purchasing agents, financial managers, bank managers, sales managers, real estate agents, securities workers, and insurance agents and brokers than it has for all other occupations in general and than it has even for engineers (1979, pp. 58-59). In addition, as Table 4 on page 12 shows, the U.S. Bureau of Labor Statistics foresees promising job opportunities for most of 12 business-related fields throughout the remainder of the 1980s, despite an overall unfavorable employment outlook for many of the other 106 occupations that the Bureau analyses in its Occupational Outlook for College Graduates. It predicts that college graduates entering the labor force over the next seven years are likely to face job-market conditions very similar to those faced by graduates during the 1970s, with those prepared to enter certain occupations such as accounting, banking, and market research having good employment opportunities.

For these reasons, and because employment opportunities through the 1980s are expected to be favorable, the Commission believes that college enrollments in business will continue to increase into the 1990s, although the rate of growth may slow. Increased enrollments by women and minorities will continue to spur overall growth in nearly all specializations in business, with the possible exception of business education.

It is generally recognized by the business community that throughout the rest of the 1980s, the preparation of "people managers" who can motivate others as well as succeed in a fiercely competitive international market and a complex financial environment will require their training and retraining in interpersonal relations and social psychology as well as quantitative analysis, computers, robotics, and manufacturing systems and strategy. If business schools update their curricula to increase the relevance and credibility of their programs and schedule their programs to accommodate part-time students, their enrollments will continue high. Otherwise, corporations will increasingly turn to in-house training and retraining programs and to nonacademic programs of professional organizations such as the American Management Association and to other corporations such as General Electric that are beginning to market their own training programs.

TABLE 4 Employment Prospects for College Graduates in Twelve Business-Related Occupations Through the Remainder of the 1980s

Occupation	Growth Prospects	Reasons for the Prospects
Accounting	Faster than average growth	Increasing pressure on business and government to improve budgeting and accounting procedures.
Banking	Much faster than average growth	Increased international trade and investment will stimulate both international and domestic banking activities.
Buying	Average growth	Slower growth than retail trade industry as a whole because of increased use of computers.
Economic Analysis	Faster than average growth	Increased reliance on quantitative methods of analysing business trends, forecasting sales, planning purchasing and production operations, and assessing social programs, natural resource use, and environmental impacts.
Hotel Management	Slower than average growth	Graduates of the nation's 50 four-year college and university programs will face competition from graduates of community colleges, technical institutes, and the Educational Insttitute of the American Hotel and Motel Association.
Insurance Underwriting	Faster than average growth	Continued expansion of insurance sales.
Market Research	Much faster than average growth	High level of marketing activity due to population growth and rising level of expectations for goods and services.
Personnel and Labor Relations	Faster than average growth	Employer support for capably-staffed employee relations programs.
Purchasing and Production Operations Management	Faster than average growth	Increased demand for market forecasting, production planning, and inventory control to avoid interrupting the production process.
Real Estate	Much faster than average growth	Increasing complexity of real estate transactions plus growth of mortgage financing and real estate counseling.
Securities	Slower than average growth	The demand for security sales workers fluctuates considerably as the economy expands and contracts.
Systems Analysis	Faster than average growth	Expansion of computer use, particularly in accounting firms and research and development firms.

Source: Adapted from U.S. Bureau of Labor Statistics, 1980, pp. 25-193.

TWO

COMPETITION FOR BUSINESS FACULTY

Even with the special salary scales for business and engineering faculty, as well as for engineering faculty, adopted by the Regents of the University of California, the University as and the State University offer salaries in business administration and accounting that are not only noncompetitive with those of prospective employers generally but also with other comparable colleges and universities.

This past year, master's candidates in business from the nation's colleges and universities received job offers that lay in Step 1 of the associate professor salary range of the State University and only $200 below the University's nine-month special scale for assistant professors in business and engineering. Worse, the State University's nine-month salary schedule for assistant professors in business ($19,044 to $22,896) lies between $8,500 and $12,400 dollars below the mean salaries currently being paid to new assistant professors in accounting at the nation's public institutions accredited by AACSB ($31,400) and between $6,200 and $8,000 dollars below those paid to new assistant professors in business administration ($27,700). And despite the University's special scale in business and engineering, it would have to hire new doctoral recipients as associate professors rather than assistant professors in order to be competitive in accounting, business administration, or most other areas of business.

SALARY OFFERS FOR BUSINESS GRADUATES

Many job offers to candidates for business degrees come through the placement services of schools of business rather than through general campus placement offices, and no nation-wide data are available on them. Nonetheless, so many employers are seeking business graduates that over half of the job offers made to M.S. candidates through general campus placement offices are in business, as are over a fourth of those for B.S. candidates.* Each

*Together, business and engineering make up over three-fourths of the job offers made through central campus placement offices, as the following table shows. But whereas business offers predominate at the master's-degree level, engineering offers dominate the bachelor's level.

Proportion of Job Offers at Placement Offices by Curricular Areas

	July 1978		July 1979		July 1980		July 1981		July 1982	
	BS	MS	BS	MS	BS	MS	BS	MS	BS	MS
Business	28%	56%	26%	56%	25%	61%	22%	57%	28%	56%
Engineering	58	29	61	31	63	27	65	30	57	28
Humanities and Social Sciences	6	3	4	2	4	2	4	2	4	3
Sciences	9	11	8	11	8	9	9	11	11	13

Source: Annual reports of the College Placement Council, 1978-1982.

year the College Placement Council collects national data on these offers as well as those in all other fields, and Table 5 shows the average starting salary offers for business degree candidates for the past five years, as reported by the Council. The Council separates these salary offers into three specializations at the bachelor's level--(1) accounting; (2) business-general, including management; and (3) marketing and distribution--and into six categories at the master's level--(1) accounting; (2) administration, including public administration and hospital administration; (3) industrial management, including industrial administration; (4) MBA with a nontechnical bachelor's degree; (5) MBA with a technical baccalaureate; and (6) MS in business, including management, marketing, and finance. It presents no comparable data on business doctorates, since as mentioned earlier less than 20 doctoral candidates in business a year use central campus placement services.

Several facts stand out as particularly significant from Table 5:

- First, salary offers have risen considerably over the five-year period between 1978 and 1982--up by over 40 percent at the bachelor's level and 48 percent at the master's level.

TABLE 5 Average Monthly Salaries Offered to Business Graduates at Campus Placement Offices, 1978-1982

	1978	1979	1980	1981	1982
Bachelor's Degree Candidates					
Accounting	$1,124	$1,206	$1,293	$1,418	$1,545
Business-General	1,004	1,102	1,218	1,356	1,477
Marketing and Distribution	977	1,040	1,145	1,265	1,370
Weighted Average	1,067	1,153	1,205	1,380	1,503
Master's Degree Candidates					
Accounting	1,332	1,416	1,517	1,647	1,847
Administration	-	-	1,569	1,697	1,726
Industrial Management	-	-	1,799	2,053	1,988
MBA with Nontechnical BS	1,498	1,611	1,795	2,000	2,135
MBA with Technical BS	1,619	1,748	1,971	2,189	2,314
MS in Business	-	-	1,794	1,984	2,099
Weighted Average	1,499	1,614	1,791	1,994	2,227

Source: Annual reports of the College Placement Council, 1978-1982.

- Second, at the bachelor's level, salaries in accounting and in business-general (including administration)--the two specialities of particular concern to the California Legislature in AB 2023--have been consistently higher than in marketing and distribution.

- Third, the highest salaries are offered to MBA graduates who have technical undergraduate preparation rather than nontechnical training, with MBAs possessing nontechnical undergraduate degrees ranking in second place.

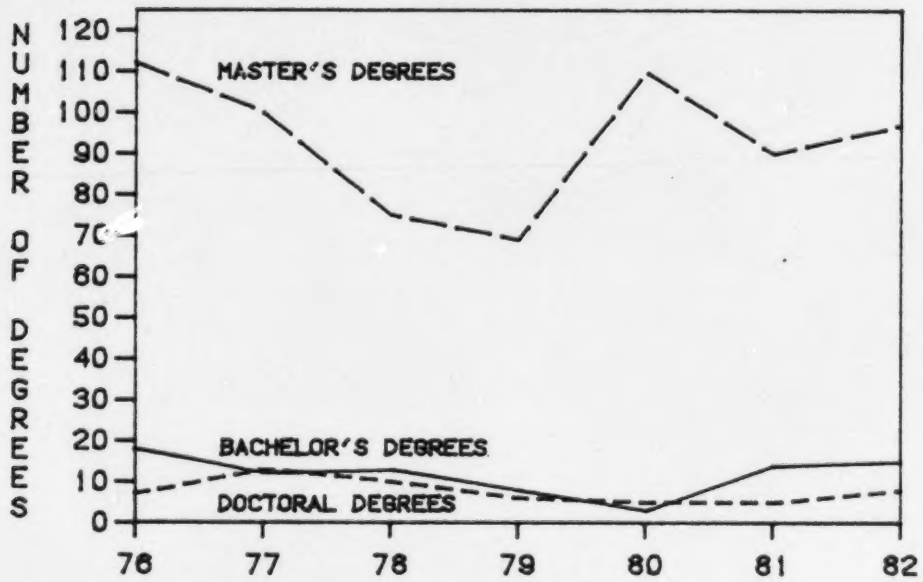
The salaries offered almost all master's degree candidates in business during 1982 surpassed the beginning twelve-month salary for assistant professors at the California State University ($1,841). Only the few offers in public administration, hospital administration, and other administrative positions (47 in all nationally) had a lower average ($1,726). And the average of offers for both categories of MBA as well as recipients of master's of science degrees in business is within $121 of the monthly beginning special salary scale for business and engineering faculty at the University of California for each month of its nine-month salary of $24,500 when converted to 12 months.

With these high offers, it is not surprising that few business graduates at the master's level are interested in continuing their studies through the doctoral level. But a second factor besides the level of these offers restricts student interest in earning a doctorate in business: unlike engineering and some other professions--where graduates with doctorates in these fields often find employment in business, industry, or government--in business the need for doctorates is largely confined to college and university teaching. A 1980-81 survey by AACSB's Task Force on Doctoral Supply and Demand found that fully 83 percent of new Ph.D.s from business schools are in teaching positions rather than non-academic work (Kaplan, Porter, and Smith, 1982, p. 5).

Evidence that preparation for teaching careers in business is losing its attractiveness among domestic business students stems not only from the decline in business doctorates from over a thousand a year in 1974-75 to less than 800 last year but also from the increasing proportion of these doctorates awarded to foreign students. Over the past decade, the proportion of nonresident aliens earning business doctorates has grown from approximately 3 percent to 20 percent nationally, and as of 1981-82 reached 30 percent among new enrollees in doctoral programs. At the University of California, nonresident aliens have earned an average of 25 percent of all doctorates awarded in business over the past ten years, in contrast to less than 15 percent among master's-degree recipients at either the University or the State University and less than 5 percent among baccalaureate candidates, as Figures 7 thru 10 on pages 16 and 17 illustrate.

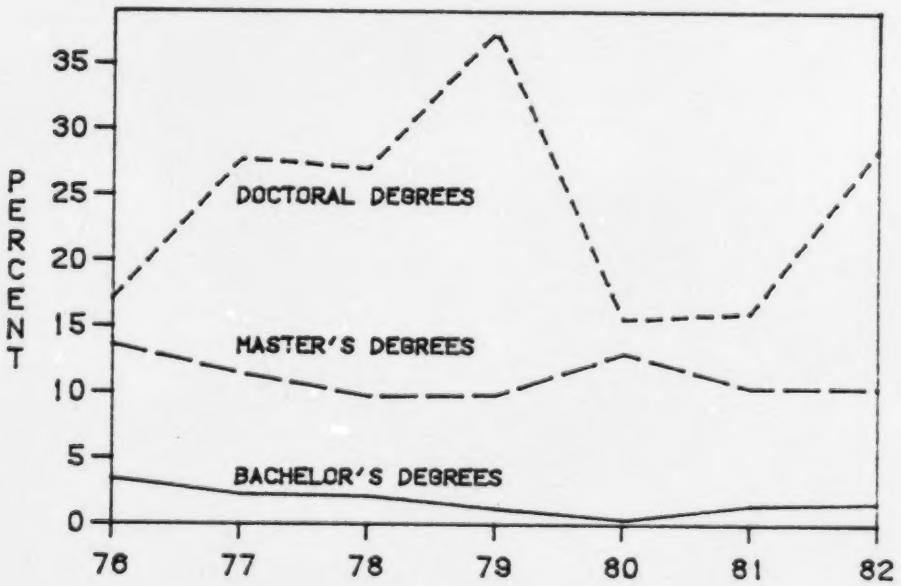
In short, competition for able master's candidates and the increasingly limited pool of domestic doctoral candidates from the 50 graduate schools of business that produce most potential business faculty poses problems for the more than one thousand American colleges and universities seeking to recruit and retain these faculty.

FIGURE 7 Number of Degrees in Business Awarded to Nonresident Aliens by the University of California, 1975-76 Through 1981-82



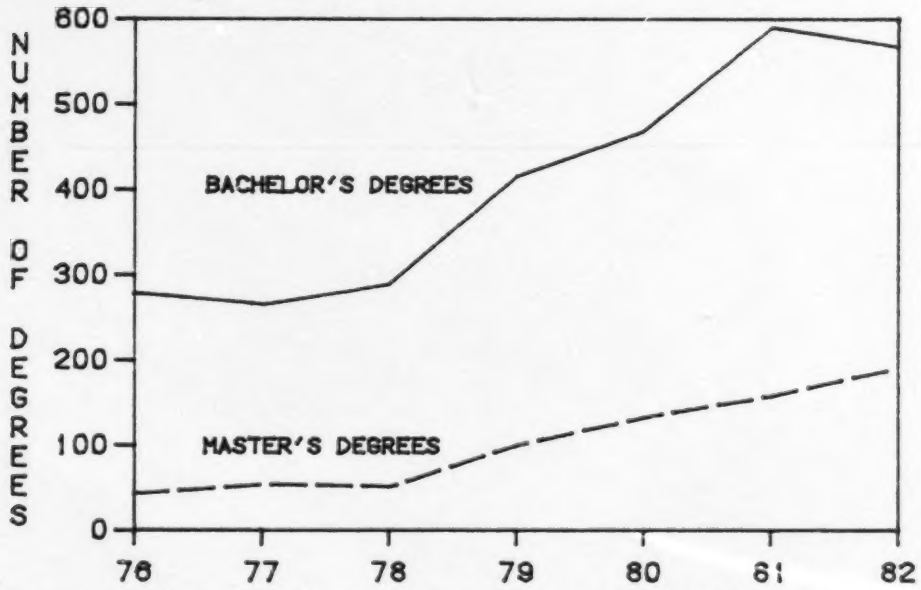
Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 8 Degrees in Business Awarded to Nonresident Aliens as a Percent of Total Business Degrees Awarded at Each Level by the University of California, 1975-76 Through 1981-82



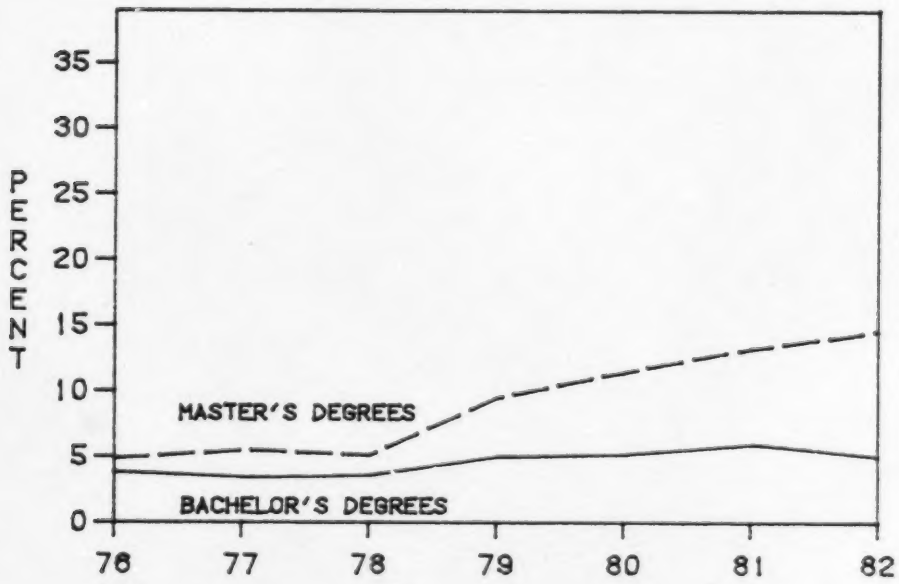
Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 9 Number of Degrees in Business Awarded to Nonresident Aliens by the California State University, 1975-76 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission.

FIGURE 10 Degrees in Business Awarded to Nonresident Aliens as a Percent of Total Business Degrees Awarded at Each Level by the California State University, 1975-76 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission.

SALARIES PAID BY COMPETING INSTITUTIONS

The most comprehensive comparable information on business school salaries nationally comes from the American Assembly of Collegiate Schools of Business. AACSB annually collects salary data for 27 areas of specialization within business plus a miscellaneous "other" category, groups these data into 15 fields, and reports them by several categories of institution, including accredited and nonaccredited and public and private. Table 6 on page 19 reports these data for 1982-83 nine-month mean salaries and median salary ranges for all business faculty combined and for six of the 15 specialties--accounting, international business, management information systems, management, business law, and business education--both at all accredited institutions and then at public accredited institutions.

The competition these salaries pose for California's public universities can be gauged by viewing Table 6 in light of current nine-month salary schedules for business faculty in the University of California and the California State University (including the University's special scale); as follows:

Rank	University of California	California State University
Professor	$37,000 - $52,400	$30,276 - $36,540
Associate Professor	32,500 - 35,300	23,976 - 28,884
Assistant Professor	24,500 - 30,900	19,044 - 22,896
Instructor	- -	17,412 - 20,868

Table 6 illustrates that unlike salaries in some other disciplines, those in business vary extensively among specialities, with faculty in accounting, international business, and management information systems at the top, management faculty somewhat lower, and business law and business education faculty near the bottom. As can be seen, these differences range between $7,000 and $8,000 for new doctorates. Student demand at both the State University and the University places emphasis on business programs that require faculty in better-paying rather than less-well-paid specialities. For example, the State University offers business education--one of the low-paying specialties--as a concentration or major on only seven of its 19 campuses; but it offers accounting and business administration on all 19. Table 5 thus shows why it has difficulty hiring and retaining faculty in virtually all areas of business: it cannot compete with other accredited public institutions--let alone with private ones--in hiring new doctorates in most fields unless it appoints them at the associate or full-professor level. As the Commission pointed out in its companion report on engineering faculty, such appointments at high ranks cause not only salary compaction for young faculty and a shortening of their tenure review period but also severe problems of equity and morale among both junior and senior faculty (1983a, p. 15).

TABLE 6 Mean and Median Range Nine-Month Salaries in Business Generally and in Six Business Specialties at all AASCB-Accredited Institutions and at Public AASCB-Accredited Institutions, 1982-83

Field and Rank	All Accredited Schools		Public Accredited Schools	
	Mean	Median Range	Mean	Median Range
ALL BUSINESS FACULTY				
Professor	$39,500	$48,000 -$49,000	$38,600	$48,000 -$49,000
Associate Professor	31,500	35,000 - 36,000	31,000	34,000 - 35,000
Assistant Professor	27,300	28,000 - 29,000	26,900	28,000 - 29,000
Instructor	20,300	23,000 - 24,000	19,700	23,000 - 24,000
New Doctorate	28,200	27,000 - 28,000	27,900	26,000 - 27,000
All But Dissertation	27,300	26,000 - 27,000	27,000	26,000 - 27,000
ACCOUNTING				
Professor	$40,400	$47,000 -$48,000	$39,700	$46,000 -$47,000
Associate Professor	33,000	35,000 - 36,000	32,600	34,000 - 35,000
Assistant Professor	29,100	27,000 - 28,000	28,800	27,000 - 28,000
Instructor	20,300	24,000 - 25,000	19,900	23,000 - 24,000
New Doctorate	31,400	31,000 - 32,000	31,200	31,000 - 32,000
All But Dissertation	29,600	27,000 - 28,000	29,500	28,000 - 29,000
INTERNATIONAL BUSINESS				
Professor	$41,900	$45,000 -$46,000	$42,000	$43,000 -$44,000
Associate Professor	33,100	33,000 - 34,000	32,200	31,000 - 32,000
Assistant Professor	28,300	28,000 - 29,000	27,800	29,000 - 30,000
Instructor	21,100	21,000 - 22,000	20,100	18,000 - 19,000
New Doctorate	30,500	26,000 - 27,000	None	None None
All But Dissertation	28,000	28,000 - 29,000	28,000	28,000 - 29,000
MANAGEMENT INFORMATION SYSTEMS				
Professor	$39,500	$42,000 -$43,000	$37,700	$41,000 -$42,000
Associate Professor	32,100	33,000 - 34,100	30,400	31,000 - 32,000
Assistant Professor	27,500	27,000 - 28,000	25,800	25,000 - 26,000
Instructor	20,300	22,000 - 23,000	19,400	21,000 - 22,000
New Doctorate	30,000	30,000 - 31,000	30,200	30,000 - 31,000
All But Dissertation	27,000	28,000 - 29,000	26,100	27,000 - 28,000
MANAGEMENT				
Professor	$38,000	$42,000 -$43,000	$37,900	$40,000 -$41,000
Associate Professor	30,500	33,000 - 34,000	30,100	32 000 - 33,000
Assistant Professor	26,400	28,000 - 29,000	25,900	26,000 - 27,000
Instructor	19,500	21,000 - 22,000	18,700	20,000 - 21,000
New Doctorate	27,100	27,000 - 28,000	26,900	26,000 - 27,000
All But Dissertation	25,800	24,000 - 25,000	26,000	26,000 - 27,000
BUSINESS LAW				
Professor	$35,600	$38,000 -$39,000	$35,200	$36,000 -$37,000
Associate Professor	28,500	30,000 - 31,000	28,100	30,000 - 31,000
Assistant Professor	23,600	24,000 - 25,000	23,400	24,000 - 25,000
Instructor	18,400	19,000 - 20,000	17,800	18,000 - 19,000
New Doctorate	23,300	22,000 - 23,000	21,000	20,000 - 21,000
All But Dissertation	24,000	25,000 - 26,000	21,000	20,000 - 21,000
BUSINESS EDUCATION				
Professor	$33,100	$34,000 -$35,000	$33,100	$34,000 -$35,000
Associate Professor	26,800	26,000 - 27,000	26,800	26,000 - 27,000
Assistant Professor	22,600	23,000 - 24,000	22,600	23,000 - 24,000
Instructor	17,600	18,000 - 19,000	17,600	18,000 - 19,000
New Doctorate	23,700	24,000 - 25,000	23,700	24,000 - 25,000

Source: American Assembly of Collegiate Schools of Business, 1982b.

The University of California is more reluctant than the State University to hire new doctorates at high ranks, and yet Table 6 shows that it would have to hire them at the associate professor level in order to be competitive with both public and private institutions in accounting, international business, management, and management information systems.

The amount of funds needed by the University and State University to recruit business faculty more successfully is clearly a function of their programmatic emphasis. The Commission's data base does not contain information on their number of faculty and vacant faculty positions by specialty, and thus the Commission cannot provide an accurate estimate of the funds that the two systems need for this purpose. Nonetheless, if both systems are to become competitive with other AACSB accredited institutions, they will need to increase their salaries to at least the combined averages for each rank and new hires that are reported by AACSB.

DIFFERENCES IN AVERAGE SALARY AMONG DISCIPLINES

The Commission also noted in its report on engineering faculty that most American colleges and universities, unlike the University of California and the California State University, operate under overlapping salary ranges that enable them to pay more to hire and retain faculty in high-demand fields than in other disciplines. Even though they may not offer formal "salary differentials" in specific fields such as business or engineering, their salary practices result in significantly different average salaries between fields (1983a, p. 13).

For example, among the 73 state universities and land-grant colleges surveyed by the National Association of State Universities and Land-Grant Colleges regarding their salaries by discipline, average salaries in business have in recent years been consistently 10 percent higher than for all disciplines, and average salaries in engineering have been 14 percent higher. (Table 7 on page 21 summarizes the results of the Association's 1982-83 salary survey.) And among 204 public colleges that are primarily baccalaureate oriented, salaries for new assistant professors are highest of all in business administration (16 percent above average), followed by computer sciences at 14 percent and engineering at 13 percent above average (College and University Personnel Association..., 1982).

The special scale for business and engineering faculty at the University provides a comparable differential, but as the Commission points out in its faculty salaries report for 1983-84, overall the University has slipped further and further behind its comparison institutions in the past two years; and the State University is not only falling behind in average salaries for all faculty but it also lacks similar differentials except where individual campuses can obtain special funds to pay them (1983b, pp. 65-69).

EFFORTS OF THE CALIFORNIA STATE UNIVERSITY TO IMPROVE RECRUITMENT AND RETENTION

On pp. 2-3 of its companion report on engineering faculty, the Commission noted that since 1980 the Trustees of the California State University have sought by various means to adopt new and more flexible salary schedules in order to improve faculty recruitment, retention, and quality. When it became evident that the Governor and the Legislature would not provide additional funds for salaries through the 1982-83 budget, the Trustees adopted two "annotations" of the salary schedule which were applicable to faculty in the disciplines of engineering, computer science, and business administration. The first was directed toward improvement of recruitment, whereby newly hired faculty in these disciplines could be placed, if necessary, at the associate professor level for salary purposes only. The second, directed toward retention, would have allowed top-step assistant professors to be advanced to the first step of associate professor in salary while retaining the rank of assistant professor.

The Legislature's Committee on Conference prohibited the second change in the CSU salary schedule (Supplementary Report, Item 6610-001-001, Number 6). With no funds available for salary increases for 1982-83, the Trustees left the decision about paying differential starting salaries in high-demand disciplines to each campus, with the campus having to generate the needed revenues out of its own sources of funds. In an effort to retain faculty in high-demand disciplines, Chancellor Reynolds issued Executive Order No. 402, authorizing two-step salary advancement for existing faculty in cases "where it is necessary is retain essential faculty in engineering, computer science, and business" and "where salary level is a major factor in retention."

TABLE 7 Average Faculty Salaries by Discipline Group at 73 State Universities and Land-Grant Colleges, 1982-83

	Professor	Associate professor	Assistant professor	New assistant professor *	Instructor	All ranks
Agriculture and natural resources	$34,743	$27,509	$23,183	$23,103	$17,277	$29,723
Architecture and environmental design	36,321	28,551	22,887	21,100	19,545	29,329
Area studies	35,323	26,445	21,169	18,833	18,173	28,757
Biological sciences	37,696	28,271	23,679	22,305	17,985	31,558
Business and management	41,647	32,844	28,304	28,319	20,372	33,841
Communications	35,139	27,241	22,143	21,155	17,345	27,127
Computer and information sciences	41,791	32,288	27,739	26,233	21,118	32,834
Education	34,912	27,314	21,328	20,776	18,018	27,998
Engineering	40,619	31,534	27,644	27,429	19,747	34,827
Fine and applied arts	33,036	25,232	20,023	18,773	16,578	26,203
Foreign languages	36,165	26,142	20,607	18,257	17,670	27,288
Health professions	41,913	32,007	25,236	25,610	20,686	31,401
Home economics	35,617	27,615	22,557	22,522	17,888	25,990
Interdisciplinary studies	37,373	26,946	21,167	21,316	18,515	27,890
Law	50,447	37,157	33,282	31,738	23,619	45,123
Letters	35,824	25,987	20,385	18,858	15,826	27,020
Library science	37,268	29,066	23,226	21,945	19,746	30,309
Mathematics	38,390	28,045	22,269	21,453	17,019	30,757
Physical sciences	38,826	28,381	23,130	22,208	18,343	33,422
Psychology	37,718	27,169	20,983	18,874	19,371	30,505
Public affairs and services	36,092	29,612	23,530	22,301	19,612	29,856
Social sciences	37,498	27,394	21,763	20,643	18,729	30,070
Technical and occupational curriculums	36,002	—	23,271	18,351	18,392	25,221
All disciplines	$38,126	$28,550	$23,677	$22,991	$18,597	$30,631

* Includes only those hired for the first time in the fall of 1982.
— Data not available.

SOURCE: OFFICE OF INSTITUTIONAL RESEARCH
OKLAHOMA STATE UNIVERSITY

Source: "Why Some Professors Earn More than Others," 1983, p. 24.

So far, only four campuses have been able to make use of the provision to pay higher salaries to newly hired business faculty at the assistant professor level: Hayward in one case, San Diego in two, San Jose in one, and San Francisco in an unsuccessful case, in that its offer was declined. Three campuses have used Executive Order 402 in an effort to retain existing faculty: Humboldt in one case, San Diego in nine, and San Luis Obispo in one.

The faculty vacancy rate in the State University system ranges from fractions of a percent in chemistry, education, english, mathematics, music, and psychology to 11 percent in computer science and engineering and to a high of 13.1 percent in business. Only about one-third of the recruitments attempted in business are successful. Seventy-one percent of those persons rejecting offers cite inadequate salaries as their reason. Another 5 percent reject offers because of high teaching loads, and 6 percent report sensing a lack of opportunities. In order to obtain new faculty in business, 71 percent of new appointments in business during the last three years had to be made at the associate and full professor levels, in contrast to between 28 and 32 percent in fine arts, letters, foreign languages, and social sciences.

EFFORTS OF THE UNIVERSITY OF CALIFORNIA TO IMPROVE RECRUITMENT AND RETENTION

The University of California developed its special salary schedule for business and engineering because it could not resolve the growing problem of recruitment and retention of faculty in these areas through other means. The new schedule became effective last June 30, but in spite of it, the University's success at recruiting new business faculty has been no better than that of the State University because it lacks salary funds in general and it does not make upper-rank appointments as readily as does the State University.

Several examples demonstrate the problem of recruitment and retention at the University:

- One campus with eleven vacant positions in business recently sought persons for four of these vacancies. In total, six offers were made but three of these declined. While the campus added three faculty, three existing faculty accepted other positions, two retired, and one was involuntarily separated, resulting in a net loss of three faculty. This was not greatly different from the two previous years when differential salaries were not in place. During those years recruitment was undertaken for seven positions, seven offers were made, and two declined. During the same period, four existing faculty accepted other positions and one retired. The result was no gain in faculty.

- A second campus with 19 vacancies in business recently sought nine new faculty. After making 11 offers, only five accepted. Meanwhile, seven existing faculty accepted better positions in terms of salary or rank at other academic institutions. During the previous two years, the campus attempted to fill 17 vacant positions. Thirteen offers were made, but

only nine persons accepted. During that interval, two existing faculty accepted positions at other institutions, and two retired. The recent experience of the campus with salary differentials in effect has been disappointing because the University is still not competitive even with these differentials.

- A third campus noted that its figures for declined offers appeared low, and it found that in many instances offers were not made to top candidates because they either withdrew from consideration or accepted other offers before formal offers could be made. Thus, for this year, the campus made only four offers to new Ph.D. candidates, along with offers for 2/9 summer support and 100 percent removal expense. Three candidates rejected these offers and only one accepted. The deterrents were high housing costs and, in the candidates' view, a poor public school system.

- A fourth campus has made 24 offers to candidates to fill vacant positions over the past three years. A total of 15 candidates declined while nine accepted. Meanwhile, four faculty numbers accepted better positions at other institutions, and three retired. The net gain was only two faculty members over the last three years. Many positions remain vacant.

Such examples offer concrete support to the evidence earlier in this report that further efforts by State government and business and industry as well as by the University and State University will be needed to improve business faculty recruitment and retention.

THREE

RECOMMENDATIONS FOR ACTION

In adopting Assembly Bill 2023, the Legislature and the Governor agreed that "the recruitment and retention of engineering, business, and accounting faculty at the University of California and the California State University are of significant importance in maintaining the prominance of those university systems." The California Postsecondary Education Commission also agrees. Charged by the Legislature to review problems in recruiting and retaining these faculty and to recommend actions to overcome these problems, the Commission has thus far in this report sought to show that California's shortage of business faculty is part of a national shortage stemming from growth of student interest in business coupled with intense competition from employers for promising bachelor's and master's-degree candidates, but that California's problem is particularly severe because of its noncompetitive faculty salaries.

Nationally, the shortage of full-time faculty in business administration and accounting is even more severe than in engineering, ranging from 12 to 33 percent depending on the area of specialization, compared to between 10 and 15 percent in engineering specialties. To address this shortage, in 1980, the American Assembly of Collegiate Schools of Business undertook a study of the problem; and California policy makers can benefit from this study's findings even though they will have to go beyond its recommendations to solve California's unique faculty shortage problems.

To conduct its study, AACSB appointed a three-member Task Force on Doctoral Supply and Demand, consisting of Deans Robert S. Kaplan of Carnegie-Mellon University; Lyman W. Porter of the University of California, Irvine; and Kenneth R. Smith of the University of Arizona. In surveying 253 business schools to determine the extent of their faculty shortage, the task force found an overall vacancy rate for doctorally-qualified faculty of 20 percent, with vacancies ranging from the 12-percent low in industrial relations to the 33-percent high in management information systems, with the next-to-highest rate of 29 percent in accounting. In 1980-81, 9,368 of the schools' teaching positions were filled with full-time qualified faculty holding doctorates, while 2,380 authorized positions were unfilled with such faculty, and the schools reported needing an additional 852 positions to meet their planned enrollment growth for 1981-82.

Based on the average number of doctorates produced in business between 1976 and 1980, the task force calculated that nearly 11 years of doctoral production would be required to fill all vacancies through 1982. The years required for filling the vacancies by speciality are:

Specialty	Years
Accounting	33.6
Finance	13.7
Management	12.4
Management Information Systems	8.1
Marketing	12.5
Economics	5.8
Operations Research	5.3
Business Policy/Corporate Strategy	7.6
Industrial Relations	4.3
Other	7.9
Weighted Average	10.9

The task force recommended to AACSB a wide-ranging program of action to overcome this shortage, including seeking faculty from other disciplines besides business and recruiting faculty with other qualifications than the doctorate. So far, however, AACSB has implemented only the task force's recommendation calling for a continuing task force on doctoral supply. California will need to adopt its own policies, including that of urging AACSB to revise its restrictive accrediting standards, in order to address its own particular problem. The Commission thus suggests the following five-point program of action to meet this need.

1. IMPROVING COMPENSATION FOR EXISTING FACULTY

Most immediately, California's public universities must enhance their recruitment and retention position by increasing faculty compensation to a competitive level in the academic marketplace.

Faculty compensation has two components--salaries and benefits. In the Commission's report on engineering faculty, it discussed the variety of options open to institutions in improving faculty benefits; but the Commission and its staff rejected all but one of them because most of them would be counterproductive: either they would call for greater numbers of faculty to serve the same number of students, or they would be more difficult to reduce than salary differentials once the supply of faculty is more adequate. The one benefit that the Commission endorses is housing subsidies. It has concluded that such subsidies as those currently offered by the University are one means to recruit and retain faculty, and hence it repeats in this report its recommendation from its companion engineering report (1983a, p. 44): "The Commission recommends that in high housing cost areas of California, such experiments should continue and be expanded to the State University with their effectiveness on recruitment and retention examined thoroughly during 1984-85."

Adequate salaries remain the most crucial element in the recruitment and retention process, and thus, as it did in engineering, the Commission recommends further use of the concept of salary differentials as a short-range

solution to the faculty shortage in business: The Commission recommends that the University of California continue its efforts to provide differential salaries in order to compete effectively in the academic marketplace for business and accounting faculty, and the California State University should be encouraged to develop and implement differential salary schedules for business and accounting faculty at all ranks to compete effectively with its comparable institutions. Both segments should work cooperatively with business and industry to extend opportunities for business faculty to increase their income through summer employment, continuing education instruction, research, and consulting.

2. DEVELOPING GREATER FLEXIBILITY TO SET SALARIES

The Commission recommends that salary differentials in business and engineering be considered only a temporary aid in improving faculty recruitment and retention in high-demand fields. As it noted in its engineering faculty report, the University of California and the California State University lack the flexibility of most other American colleges and universities in utilizing overlapping salary ranges to negotiate individual salaries in all disciplines, respond rapidly to changing demands of the academic marketplace across disciplines, and avoid abnormal skewing of rank distribution (1983a, pp. 47-49). In that report, the Commission stated (p. 47):

> While being mindful of the implications of collective bargaining, as a long-range solution the Commission recommends that the State encourage the Regents of the University, the Trustees of the State University, and the Board of Governors of the Maritime Academy to phase in overlapping salary ranges with sufficient flexibility to accommodate changes in demand within engineering.

In its even more recent report on faculty and administrative salaries generally (1983b), the Commission extended that recommendation to all disciplines, and it has adapted that recommendation for use here to emphasize its applicability to business as well as other fields of study: It is recommended that the State encourage the Regents of the University of California and the Trustees of the California State University to phase in overlapping salary ranges at all academic ranks and that these ranges contain sufficient flexibility to accommodate changes in demand within business.

3. SEEKING FACULTY WITH A WIDER RANGE OF EXPERTISE

The AACSB task force concluded from its study of the shortage of business faculty that part of the shortage stems from the rigid quantative standards for AACSB accreditation. Among all nationally recognized accrediting agencies, AACSB continues to rely more on quantitative than qualitative standards in its review of programs. Unlike most other agencies, for example, it defines the minimum number of full-time equivalent and full-time faculty, the distribution of faculty among day and evening course offerings and locations,

course preparations and teaching loads per week, the number of options that must seek accreditation, and, most restrictive of all in terms of faculty recruitment, faculty possession of the doctorate. (Appendix C on pp. 39-42 discusses these criteria in detail and compares them with qualitative criteria in engineering.) For instance, its standard for doctorates among business administration faculty reads:

> At least 90 percent of the full-time equivalent faculty...shall possess qualifications such as the PhD, DBA, JD, or LLB, masters with professional certification, and appropriate masters degrees.
>
> The number of full-time equivalent faculty holding the PhD, DBA, or "other appropriate doctoral degree" shall be not less than the sum of 50 percent of the minimum number of faculty required at the undergraduate level..., excluding principles of accounting courses taught by those who have both the masters degree and an appropriate professional certification, and of 75 percent of the minimum number of faculty required at the graduate level.... In addition to the PhD and DBA, other doctoral degrees that are research-based and are the highest earned degrees in their field may be appropriate (1982a, pp. 23-24).

And AACSB applies this standard across the entire offerings of an institution:

> The number and qualifications of faculty and their distribution among day and evening course offerings and locations shall be such that each group of students has reasonably comparable opportunity to study with doctoral, full-time, and other qualified faculty (p. 25).

The AACSB task force has recommended two major changes in these quantitative standards: modifying the doctoral and full-time standards to permit greater use of experienced executives with specialized skills to teach certain courses, and changing the distributional requirement whereby schools must meet the doctoral standard field-by-field. Viewing the existing requirements as not only unnecessarily constraining but unrealistic, the task force has urged AACSB to measure the overall quality of a business unit and not require each individual sub-field to meet numeric standards. It states:

> We believe that the numeric standards established by the AACSB criteria, particularly the field by field or distributional requirements, have substantially increased the demand for Ph.D.s. For many schools, this increased demand is over and above what these schools would feel is necessary to deliver a program that meets its quality standards and objectives. For example, schools might wish to meet some of their teaching requirements through the judicious use of doctoral students, part time faculty, Ph.D.s from related disciplines, and experienced executives. The AACSB accreditation criteria fail to recognize particular situations for which faculty other than those with doctorates from business schools may be appropriate either for the particular mission of a school or for a particular field of study (p. 6).

The task force found that, perhaps out of fears about meeting AACSB standards, the 253 schools its surveyed had hired 80 percent of their faculty from among graduates with business doctorates and another 10 percent from among graduates with economics doctorates. The task force proposed greater use of non-business doctorates:

> One of the few bright spots in the limited supply of doctorates for business schools is the availability of Ph.D.s from related disciplines such as economics, psychology, operations research, sociology, statistics, and political science. Faculty from these disciplines should be welcomed at business units since they bring excellent social science training and will improve the quality of research performed at the schools. At present there is a burden on schools to justify the use of faculty with non-business Ph.D.s. We believe that this standard should be relaxed so that related disciplines are encouraged to be used effectively at business units. Only if a Ph.D. is in a field substantially different from the field that the faculty member has been hired to teach in should the discipline of the Ph.D. be seriously questioned during the accreditation process (p. 11).

Among the disciplines identified by the task force for which training is relevant to business schools are the following:

Business Fields	Examples of Related Disciplines
Finance	Economics, Operations Research, Decision Theory
Accounting	Economics, Operations Research, Psychology
Marketing	Psychology, Geography, Political Science, Economics, Operations Research, Statistics
Organizational Behavior	Psychology, Sociology, Labor Relations
Quantitative Methods/ Operations Management	Mathematics, Statistics, Operations Research, Industrial Engineering
Management Information Systems	Computer Science, Operations Research, Math, Physics

The Commission agrees with the task force that qualified faculty should be recruited from a wider range of background and it believes that modifying AACSB's present standards requiring specified proportions of "doctorally-qualified" faculty and emphasizing instead "qualified" faculty would enhance, rather than degrade, the quality of business programs. It is important that University and State University officials and professional associations take cognizence of the AACSB task force recommendations regarding increased recruitment of qualified faculty without doctorates and with doctorates from other disciplines than business.

The Commission recommends that the governing boards, administrators, and faculty of the University and State University support these modifications of AACSB standards and it suggests that they expand their efforts to the fullest extent possible under AACSB standards to recruit expert faculty from all relevant disciplines, regardless of whether or not they possess the doctorate.

The Commission also recommends to AACSB that it revise its quantitative standards along the lines suggested by its task force.

In this regard, the Commission has considered the possibility of recommending that the University and State University discontinue AACSB accreditation if its accrediting standards impose undesirable limits on faculty qualifications, workload, recruitment, promotion, or innovation. For the time being, it rejects this approach for two reasons:

1. Specialized accreditation of business and accounting programs, despite its problems, can have benefits for California students, employers, and institutions:

   - For students, it can help in selecting a campus with programs that meet accepted standards of excellence, curricula that contain both breadth and depth of coverage of a common body of knowledge, and adequate faculty and teaching resources. It can facilitate their admission to advanced degree programs, and it can aid their employment, since some employers--particularly large multinational corporations--do not recruit graduates from unaccredited programs.

   - For employers, it can help assure that prospective employees have been exposed to broad yet specialized training in the discipline and have had access to competent faculty and adequate support services such as libraries and laboratories. It indicates an institutional commitment to nationally-recognized standards for its program and can provide one criterion for corporate grants-in-aid, contributions of equipment, other corporate support, and cooperative programs such as student internships and faculty-staff exchanges.

   - For institutions, it offers explicit and widely-accepted minimum criteria of excellence for use in goal setting and internal self study; it provides periodic opportunities for external review of programs by academics at comparable institutions; and it can aid recruitment and retention of faculty, since potential faculty tend to prefer affiliation with an accredited program than with a non-accredited program.

2. Improvements in accrediting standards will be achieved better by institutions, employers, and government agencies actively promoting more realistic and desirable criteria than by a few institutions withdrawing from accreditation.

This year offers a particularly effective opportunity to exert such positive action. The Council on Postsecondary Accreditation (COPA), the academic community's body for coordinating and improving accreditation, is reviewing its recognition of AACSB as the specialized accrediting agency for business administration, and it will accept comments through August 3 of this year

regarding AACSB's recognition. On October 3 in Phoenix, COPA will meet to determine whether or not AACSB should continue to be recognized. The Commission therefore recommends to the Council on Postsecondary Accreditation that it require AACSB to modify its standards to allow for flexibility with the goal of quality along the lines suggested by its task force for continued COPA recognition.

4. EXPANDING CAREER PATHS AND INTERCHANGE OF EXECUTIVES AND ACADEMICS

Revising AACSB's standards in accordance with its task force recommendations will permit experienced executives and faculty to move more freely between business and academia and allow universities to bring the expertise of experienced executives with specialized skills from business and industry to the campus on a full- or part-time basis. It will also encourage business schools to recruit more faculty from other disciplines such as the social sciences and the humanities and to have them hold joint appointments in business and their own disciplines. Joint ventures between business and academia can offer one solution to the need for continued professional development of both managers and professors of management.

Therefore the Commission recommends that business and industrial corporations encourage and provide incentives for qualified employees with special expertise to teach as part-time, loaned, or full-time faculty members and that the University and State University continue to work cooperatively with corporations and professional societies in establishing and expanding programs to aid the exchange of experienced executives and faculty between business and the campus.

5. INCREASING THE SUPPLY OF POTENTIAL FACULTY

Finally, despite the use of more non-doctorates for business instruction, to improve the supply and quality of business faculty over the long run, more students should be encouraged to complete doctoral study in business. The University of California, the sole provider of business doctorates among California's public institutions, has not attracted enough students to its doctoral programs to supply California's need. In part, this has been due to the fact that jobs are so plentiful and salaries so high for master's degree graduates that few students have incentive to enter a doctoral program. But active recruitment and financial aid can increase this pool of highly promising doctoral applicants. The Commission recommends that the University and State University schools of business work jointly to identify and recruit promising doctoral students in business administration and accounting as well as publicize the career opportunities available in academia. It suggests that the Chairpersons of the two Councils of Deans of Business Administration act as coordinators for these activities.

Because the proportion of non-residents among doctoral recipients is already high compared to master's and bachelor's degree holders and, because doctoral education is expensive the Commission recommends that the University and the State University work with business and industry to initiate and expand their support of domestic doctoral candidates through direct grants to institutions or related educational foundations and to students in the form of traineeships, scholarships, and awards.

CONCLUSION

Quality business programs in California's colleges and universities are central to the economic prosperity of the State.

Preparation of students in business administration and accounting has become a major role for the California State University. Approximately 20 percent of its students now enroll in business and accounting, and, of these, about 25 percent enroll in accounting. If it were to fill its vacant accounting faculty positions in order to comply with AACSB standards for accreditation, it would need to hire faculty equal to nearly two-thirds of the nation's doctoral recipients in accounting for one year. In other areas such as finance, marketing, and quantitative methods, it faces an equally difficult task to recruit and retain faculty. Its salary schedule that lags $8,000 to $10,000 below the academic marketplace for new assistant professors will not allow it to maintain quality nor provide access for students seeking a career in business.

The University of California, known worldwide for its academic excellence and research, has only had limited success in developing its graduate schools of business. After considerable study, its Regents adopted a special salary scale for faculty in business administration, management, and engineering in order to become competitive in the marketplace. Yet, its special scale currently lags behind the competition for new assistant professors by approximately $6,000.

The salary differences cited here and throughout this report are for 1982-83. The Commission's recent report on faculty salaries indicates that even this competitive disadvantage will worsen substantially unless the Legislature and the Governor provide additional resources to the two segments. Thus, while the Legislature, the Governor, and citizens of the State are rightfully concerned about K-12 education, they should not be unmindful of the urgent needs of the State's universities.

Assembly Bill No. 2023

CHAPTER 1017

An act relating to public postsecondary education, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 13, 1982. Filed with Secretary of State September 14, 1982.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2023, Elder. Engineering, business, and accounting faculty: CSU and UC.

Existing law provides for the California State University, the University of California, and the California Maritime Academy to be administered by the trustees, the regents, and the California Maritime Board of Governors, respectively.

This bill would declare the Legislature's findings concerning the recruitment and retention of engineering, business, and accounting faculty at the University of California and the California State University, and that of marine engineering faculty at the California Maritime Academy.

This bill would require the California Postsecondary Education Commission to review various studies and to report to the Legislature regarding actions undertaken by the University of California and the California State University regarding engineering, business, and accounting faculty, as specified.

The bill would take effect immediately as an urgency statute.

The people of the State of California do enact as follows:

SECTION 1. The Legislature hereby finds and declares that the recruitment and retention of engineering, business, and accounting faculty at the University of California and the California State University are of significant importance in maintaining the prominence of those university systems. The Legislature also finds the recruitment and retention of marine engineering faculty at the California Maritime Academy to be a matter of legislative concern.

SEC. 2. The California Postsecondary Education Commission shall, by March 31, 1983, report to the Joint Legislative Budget Committee on the impact of actions taken for 1982–83 by the University of California, the California State University, and the California Maritime Academy, as well as studies conducted by related professional associations, with regard to changes in engineering faculty salaries, new employee salary differentials, and uses of investment in people funds as faculty incentives in response to legislative intent.

In addition, the commission shall also review relevant state,

regional, and national studies and make related, specific recommendations for action by the Legislature, industry, and educational institutions.

The commission shall also review actions or studies undertaken by the University of California and the California State University, as well as studies conducted by related professional associations, to address problems of recruitment and retention of faculty in business administration and accounting. The results of this review, and relevant recommendations, shall be reported to the Legislature by June 30, 1983.

SEC. 3. This is an urgency statute necessary for the immediate preservation of the public peace, health or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

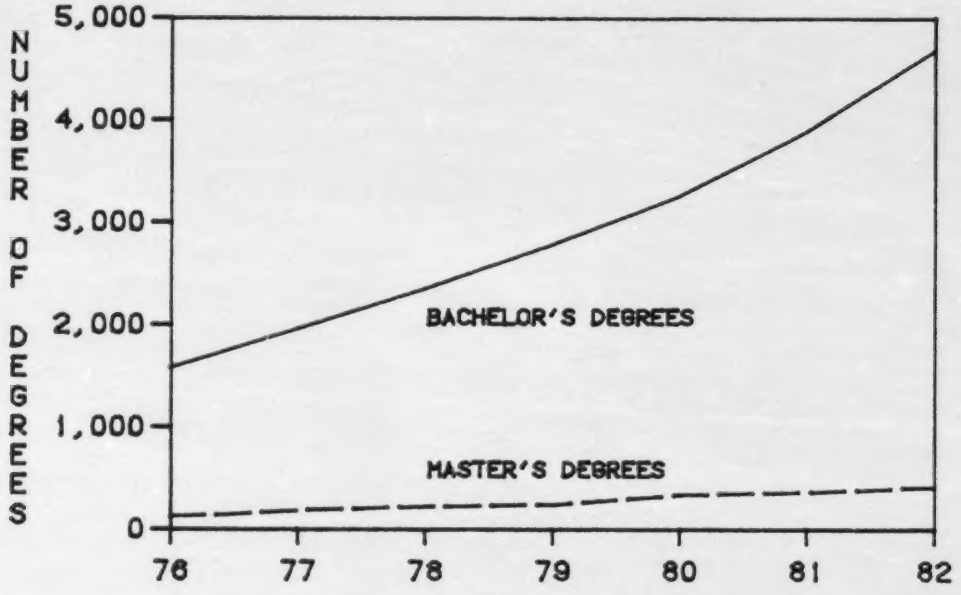
Due to the critical shortage of teaching personnel in the fields of engineering, business administration, and accounting, it is necessary to determine as soon as possible the extent of the progress by institutions of higher learning regarding recruitment and retention of these individuals so that California's highest standards of academic excellence can be maintained.

O

APPENDIX B

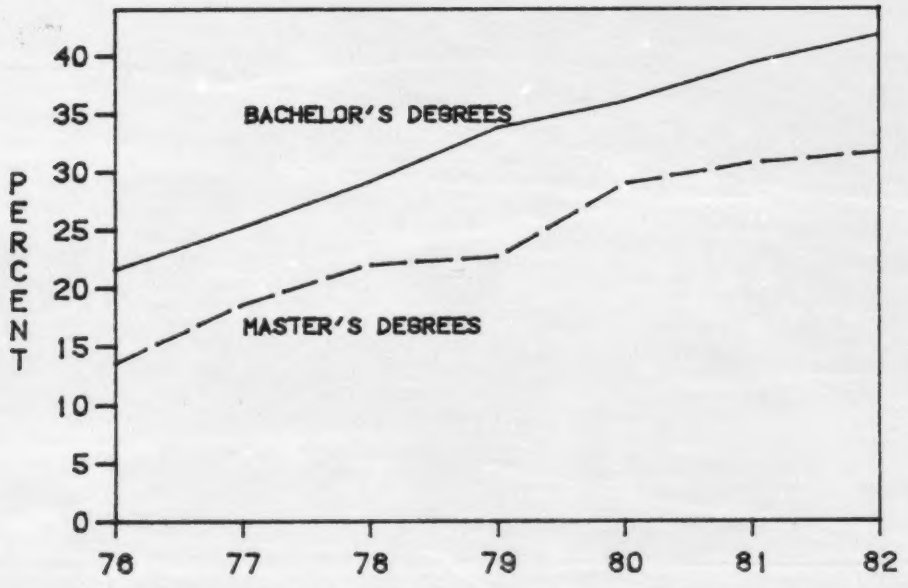
Business Degrees Conferred on Women and Ethnic Minorities, 1975-76 Through 1981-82

Number of Degrees in Business Awarded to Women by the California State University 1975-76 Through 1981-82



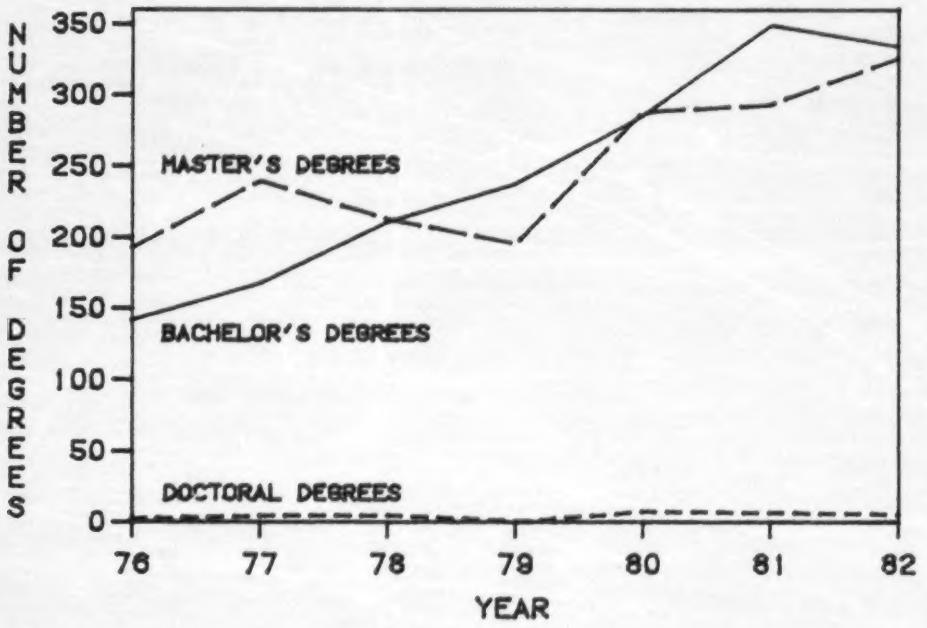
Source: Analytical Studies, California Postsecondary Education Commission.

Degrees in Business Awarded to Women as a Percent of Total Business Degrees Awarded at Each Level by the California State University, 1975-76 Through 1981-82



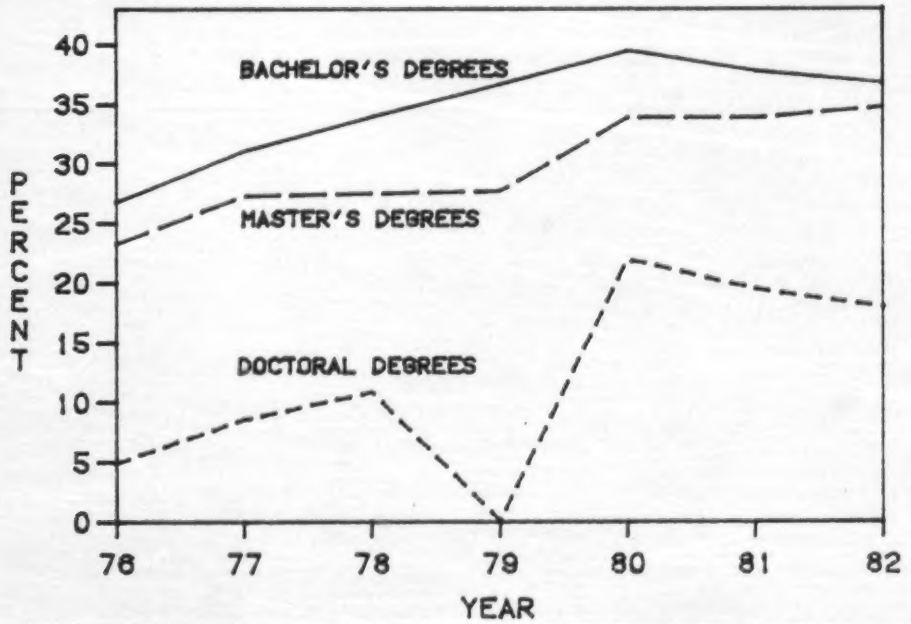
Source: Analytical Studies, California Postsecondary Education Commission

Number of Degrees in Business Awarded to Women by the University of California, 1975-76 Through 1981-82



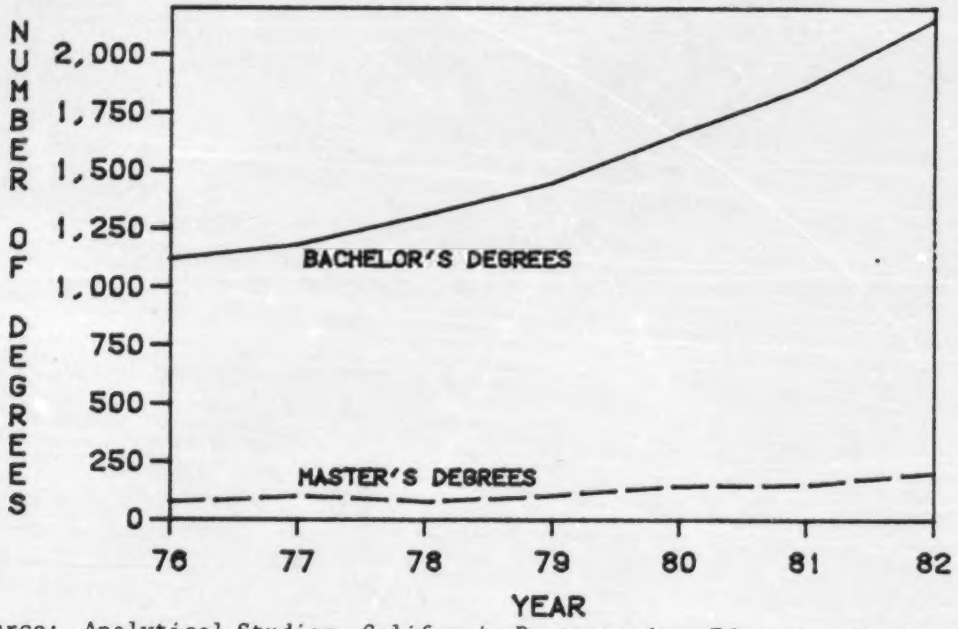
Source: Analytical Studies, California Postsecondary Education Commission.

Degrees in Business Awarded to Women as a Percent of Total Business Degrees Awarded at Each Level by the University of California, 1975-76 Through 1981-82



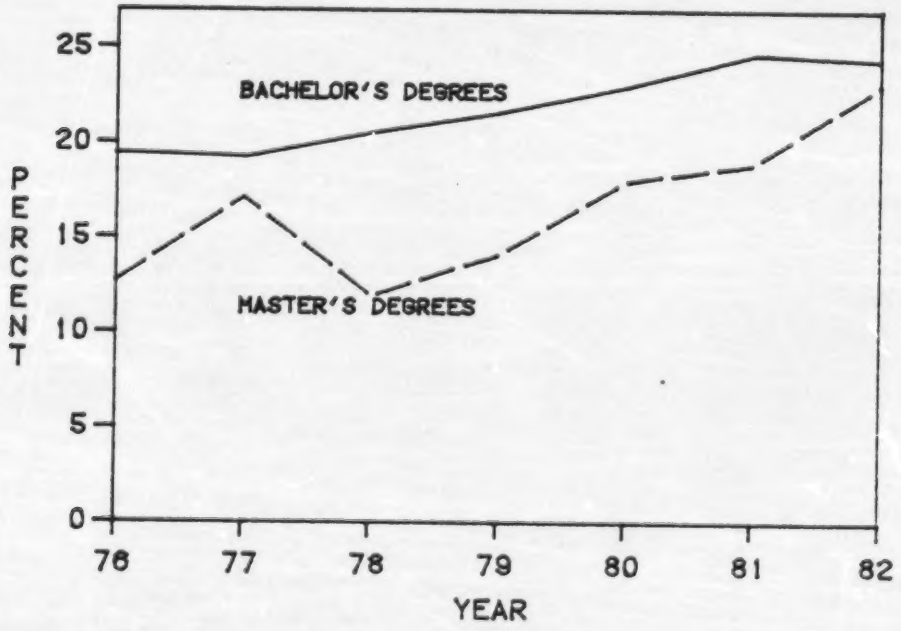
Source: Analytical Studies, California Postsecondary Education Commission.

Number of Degrees in Business Awarded to Minorities by the California State University, 1975-76 Through 1981-82



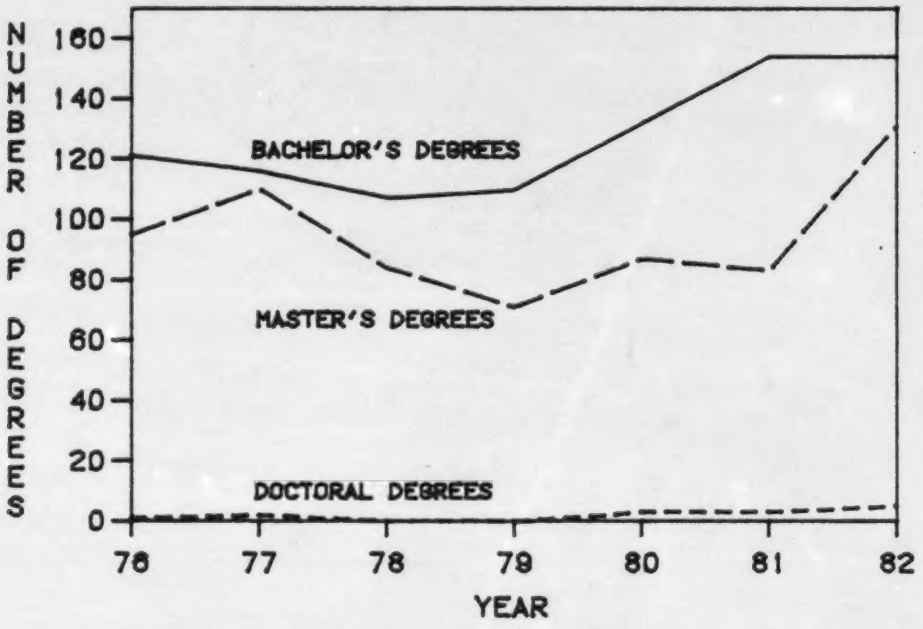
Source: Analytical Studies, California Postsecondary Education Commission.

Degrees in Business Awarded to Minorities as a Percent of Total Business Degrees Awarded at Each Level by the California State University, 1975-76 Through 1981-82



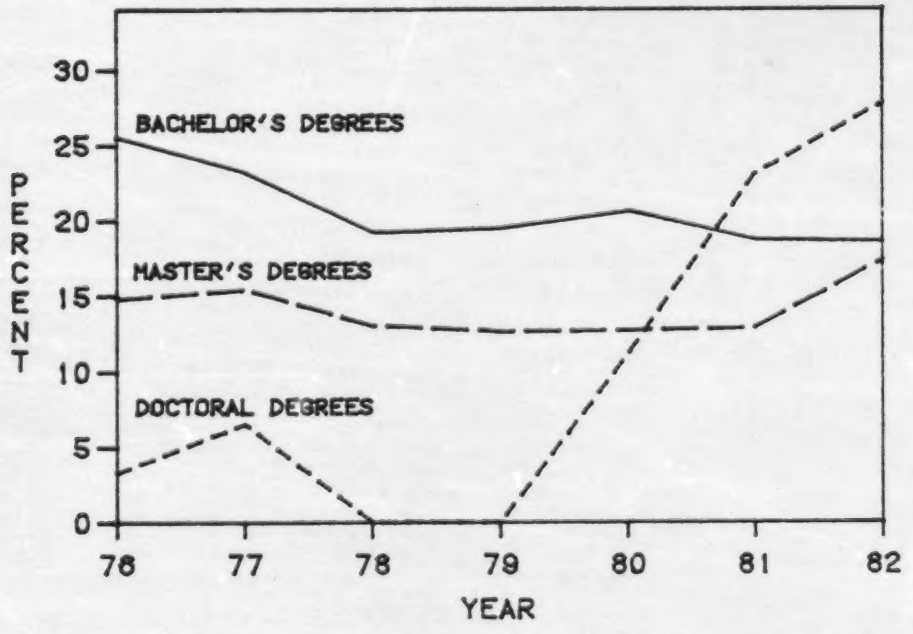
Source: Analytical Studies, California Postsecondary Education Commission.

Number of Degrees in Business Awarded to Minorities by the University of California, 1975-76 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission.

Degrees in Business Awarded to Minorities as a Percent of Total Business Degrees Awarded at Each Level by the University of California, 1975-76 Through 1981-82



Source: Analytical Studies, California Postsecondary Education Commission.

APPENDIX C

Accreditation Criteria in Business and Engineering

It is not the Commission's intent in this report to examine accreditation criteria for various disciplines, since a separate study of accreditation is already in the Commission's workplan for 1982-83. Nevertheless, AB 2023 identifies two high-demand fields of study--engineering and business--for review of problems in faculty recruitment and retention, and this review would not be complete without an abbreviated exploration of accreditation criteria as they affect faculty selection.

In general, criteria of the American Assembly of Collegiate Schools of Business (AACSB) for accrediting programs in business administration and accounting incorporate many quantitative standards, compared to those in engineering developed by the Accreditation Board for Engineering and Technology (ABET).

For example, AACSB defines the minimum number of full-time equivalent and full-time faculty for business administration as follows:

> Full-time equivalent faculty
>
> The full-time equivalent faculty shall be not less than the sum of the following: for the undergraduate program, one FTE per 400 student credit hours taught per term; for the graduate program, one FTE per 300 student credit hours taught per term.
>
> Full-time faculty
>
> The faculty shall be composed largely of full-time personnel who are responsible for the planning and implementing of the school's programs. The full-time faculty required shall be at least 75 percent of the full-time equivalent faculty required...
>
> Distribution of faculty
>
> The number and qualifications of faculty and their distribution among day and evening course offerings and locations shall be such that each group of students has reasonably comparable opportunity to study with doctoral, full-time, and other qualified faculty (1982a, p. 25).

Standards for accounting are essentially the same as for business administration.

In contrast, ABET describes the appropriate size of faculty in the following manner:

> The proper size of the faculty is determined by the enrollment in the program and by the division of labor in such activities as

> classroom teaching, laboratory supervision, research, direction of graduate work, extension or continuing education studies, and active participation in professional and technical societies (p. 6).

AACSB construes the number of faculty needed in terms of quantitative limits on teaching loads of individual faculty members as follows:

> Members of the faculty should not teach courses in excess of twelve credit hours per week, have preparations in more than three different courses per week nor teach in more than two fields. Assignment of responsibilities for graduate instruction, research direction, and thesis supervison, or of other major responsibilities should result in downward adjustment of the teaching load. Judgments concerning teaching, research, and administrative loads of the faculty shall be based upon the entire academic year (pp. 25-26).

In contrast, ABET looks for evidence of concern about improving the effectiveness of pedagogical techniques. In defining teaching loads, ABET states:

> Teaching loads should be compatible with the existing climate for research and professional development. Engineering faculty members, regardless of their individual capabilities, cannot function effectively either as teachers or seekers of new understanding if they are too heavily burdened with classroom assignments. Stimulation of student minds presupposes constant and energetic faculty study of new developments in areas of technology and science and in areas of instructional innovation (p. 6).

The most difficult standard to achieve at a time when enrollments are increasing and the doctoral supply is declining relates to faculty qualifications. AACSB places emphasis on faculty posessing the doctorate. Its standards for business administration state:

> Faculty Qualifications
>
> Significant dimensions in the consideration of faculty competence are the doctoral and professional qualifications of the faculty.
>
> At least 80 percent of the full-time equivalent faculty required... shall possess qualifications such as the PhD, DBA, JD or LLB, masters with professional certification such as the CPA, and appropriate masters degrees.
>
> The number of full-time equivalent faculty holding the PhD, DBA, or "other appropriate doctoral degree" shall be not less than the sum of 50 percent of the minimum number of faculty required at the undergraduate level,... excluding principles of accounting courses taught by those who have both the masters degree and an appropriate professional certification, and of 75 percent of the minimum number of faculty required at the graduate level.... In addition to the PhD and DBA, other doctoral degrees that are research-based and are the highest earned degrees in their field may be appropriate (pp. 23-24).

For accounting programs, AACSB summarizes the various percentages for doctorates, certifications, and relevant experience shown here, with relevant experience defined as "at least 60 days of [accounting] experience within the most recent five-year period."

Standards for Accounting Programs in Terms of Percent of Required FTEs

PROGRAMS	☆†Doctorate	☆†Professional Certification	☆†Either Doct. or Prof. Certification	Relevant Experience
Baccalaureate with accounting concentration	50	40	60	40
Masters in business administration w/accounting concentration	75	40	80	40
*Masters of accounting (4th, 5th & grad. years)	75	60	90	60

☆Faculty holding the doctorate and professional certification shall be included in the tabulations for both (1) doctoral requirements and (2) professional certification requirements; however, in determining FTE with either the doctorate or professional certification, a faculty member may be counted only once.

†A small variance in the required percentages of the faculty holding (1) doctorates and (2) professional certifications may be judged acceptable if the percent of the required minimum full-time equivalent faculty who hold the doctorate and/or professional certification meets or exceeds the designated levels.

*For undergraduate accounting course credits taken prior to the fourth year, the faculty standards for baccalaureate programs with accounting concentration shall apply.

Source: AACSB, 1982a, p. 40

In constrast, ABET specifies faculty qualifications as follows:

> The overall competence of the faculty may be judged by such factors as the level of academic training of its members; the diversity of their backgrounds; their non-academic engineering experience; their experience in teaching; their interest in and enthusiasm for developing more effective teaching methods; their level of scholarship as shown by scientific and professional publications; their registration as Professional Engineers; their degree of participation in professional, scientific and other learned societies; recognition by students of their professional acumen; and their personal interest in the students' curricular and extracurricular activities (p. 6).

Note that ABET does not specify a particular percentage of doctorates or other certifications. Rather, ABET stresses that "the heart of any educational program is the faculty" and expects competent, qualified, and forward-looking faculty coupled with an overall scholarly atmosphere.

Other quantitative or restrictive accreditation standards of AACSB warrant review, such as the time lapse between accreditation of new programs where accredited programs already exist, the number of options that must seek accreditation, and the use of specialized admission tests at the graduate level. However, this portion of AACSB criteria is the most troublesome in contributing to the current shortage of faculty in business administration and accounting.

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